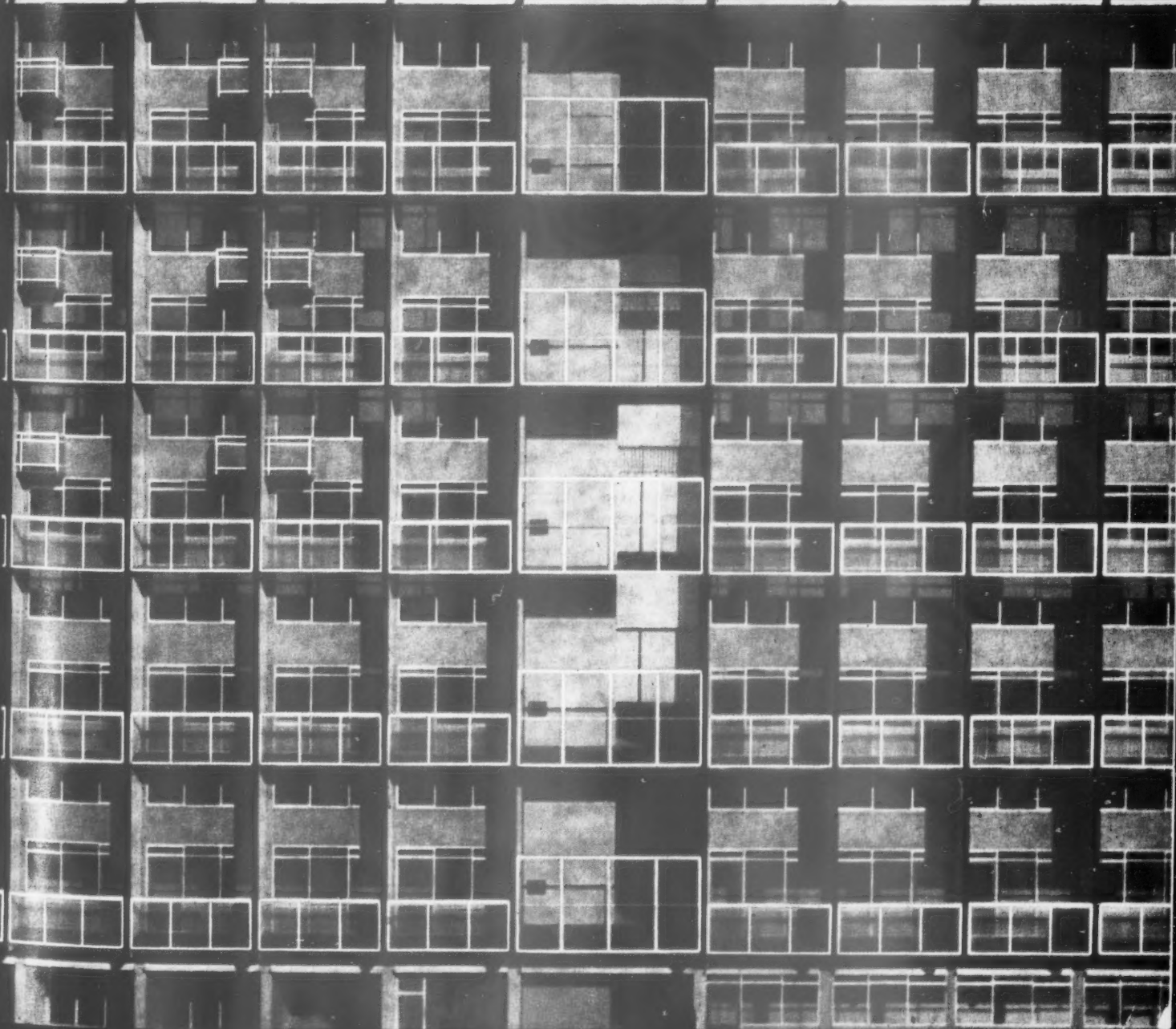
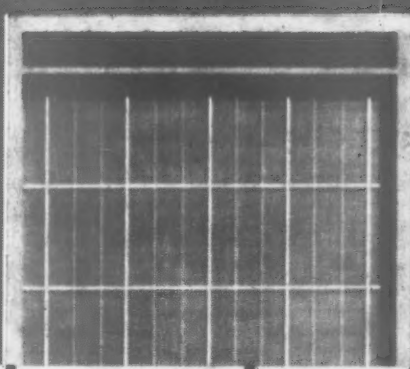


THE ARCHITECTURAL REVIEW VOLUME CXIX
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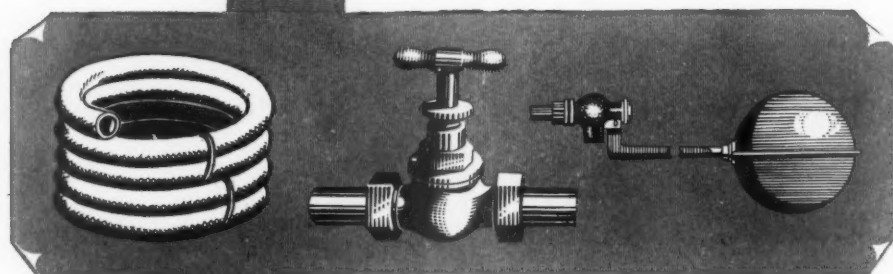
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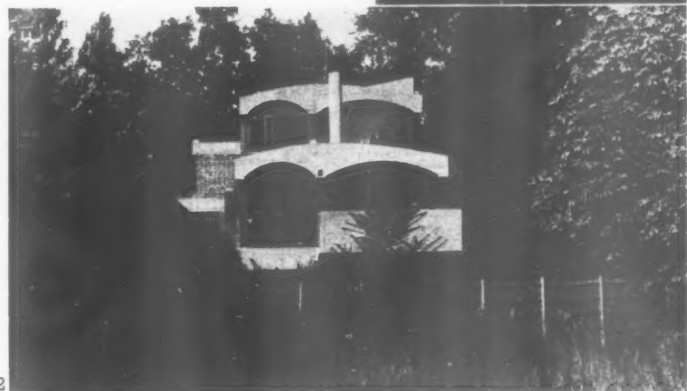
L.I.

MARGINALIA

JAUL COMPLETED. LeCorbusier's remarkable *Maisons Jaoul* in Neuilly are now completed and the bare structure of ponderous vaults and load-bearing brick which appeared in the illustrations to James Stirling's article in the *ARCHITECTURAL REVIEW* for September, 1955, can now be seen in enclosed and habitable form. The open ends of the cave-like interiors are closed by panelled patterns of transparency and opacity, 1, formed of windows, shelving and cupboards, and grass is already growing on top of the vaults as intended. The effect of this infilling is to make the whole structure appear much lighter, as may be seen by comparing 2 with views from the same vantage point of the unfinished building, and both massing and surface qualities are now nearer to his intentions as they appear in the published drawings.

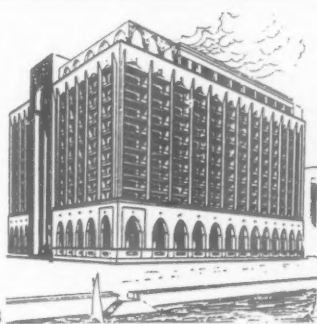


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2

DESIGN BY THE NILE. Contrasting approaches to the design of luxury hotels are shown by two recently published projects for Cairo. Shepherds Hotel is to be rebuilt (architects Elias Shaghoury and Ahmed Fuad), after its destruction by fire three years ago, in a quasi-Saracenic style, 3, which seems to be a rather muddled attempt at keeping in keeping with a local flavour which was always rather suspect anyhow, and will boast arcades of pointed arches at ground and roof terrace levels. Sandwiched between these two slabs of Orientalism, the façade will have the sun-breaker, every-room-its-private-balcony treatment which has been made unavoidable on hotels of this class in hot-climates by the activity of the Hilton Hotels organization, who will also be represented in Cairo by the



3

new Nile Hilton, 4, 5. This will be entirely in the international Hilton manner (architects James McKeown and James Filson), and, as at Istanbul,

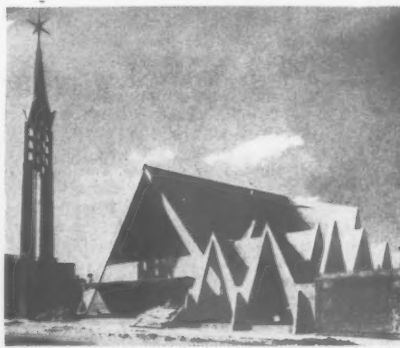


5

will make concessions to local traditions in its ancillary structures only, even if not in the precise forms—

mural friezes, statues and lotus-capitalised columns—which appear in the model.

FOLDED-SLAB CHURCH. The brilliant Hispano-Mexican engineer Felix Candela continues to justify his assertion that the post-and-lintel orthodoxy in reinforced concrete is a harmful restraint on design (*ARCHITECTURAL REVIEW*, September, 1953) with buildings of extraordinarily inventive forms. The new church of the *Virgen Milagrosa*, 6, in Mexico City represents one of the most bizarre shapes yet created by the application of his favoured vault-form, the hyperbolic paraboloid. This form, which has the valuable



6

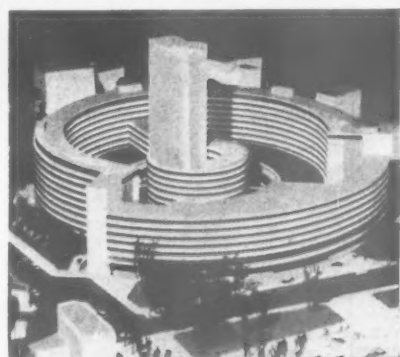


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Progressive Architect

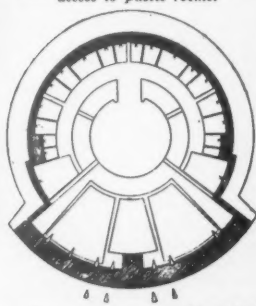
RADIO CENTRE FOR PARIS. A monumental and unmistakably French contribution to the problem of the design of broadcasting centres (*ARCHITECTURAL REVIEW*, August, 1955) is now reported to be under construction on the Quai de Passy, Paris. The design, by Henry Bernard, a Rome Prize winner, was selected in a national competition in 1952, and in its circular form, 8, its highly rationalized separation of circulations, and the placing of control

rooms and record-stacking at its centre it seems to stand solidly in the French tradition of ideal plans as seen in the work of Boullée and Ledoux. More immediately interesting to practical architects, who may find themselves at some time grappling with a similar design-problem, is the ease with which the circular plan, 9, absorbs those normally uncomformable elements, three wedge-plan auditoria (seen in the lower part of the plan).



8

Below, the 2nd floor, showing (dark area) circulation for visitors, and access to public rooms.



9

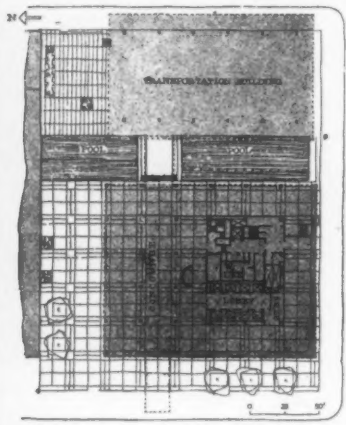
Forum (Amsterdam)

MILE-HIGH CENTER. An impressive example of the 'new' real-estate development at work in USA is provided by Mile High Center, a recently completed office block in Denver, Colorado, financed by the celebrated William Zeckendorf. Eschewing several practices that are thought to be unavoidable in speculative central-area developments, it makes no attempt to cover the whole site, thus avoiding set-backs on upper storeys and enabling the architect, I. M. Pei, to erect a neat square block whose walls lift twenty-two floors sheer and unbroken, 10. Furthermore there are no shops around the base of the block at pavement-level, where it has been largely opened out to form a covered entrance-concourse to the offices; 11, the shops have been dismissed to a separate concourse at basement level



10

under the exhibition hall, whose curved vault is visible in the foreground of the illustration. The wall-treatment of the main block is also unusual, with its carefully contrived 'weave' of grey-toned main-structure members and tan-coloured subsidiaries, and has been carefully worked out to present the same visual pattern at night when illuminated from within.



11 Architectural Forum

The Art of Re-issuing III

Two recent additions to the growing bibliography of classics put back into circulation (AR, *Marginalia*, August and October, 1954) are Lethaby's *Architecture* (Oxford, 18s.) and Gropius's *The New Architecture and the Bauhaus* (Faber, 15s.), but classics though both may be—and classics of the empirical, functional, *sachlich* approach to architecture, in both cases—they could not present a stronger contrast. The contrast in the matter is well known—a common admiration for engineering and a suspicion of taste, aesthetics and style they both have, and the expected emphasis on purpose and structure—but whereas Lethaby propounds his philosophy by means of a discursive time-journey from pre-dynastic Egypt to Tower Bridge, Gropius is his usual magnificently a-historical self—apart from a single reference to Schinkel, the creation of the world seems for him contemporary with the foundation of the *Werkbund*.

But it is in the artifices of reissuing that the contrast is most formidable. *Architecture* comes in a slightly larger format than its original 'Home University' publication, completely reset, and with a preface and epilogue by Professor Basil Ward which, like the streamlined nose and tail of a restyled automobile, facilitates its penetration into our contemporary modes of thought—and its equally rapid exit therefrom. The shock effect of a period text is vitiated if we are left at the end, not with a characteristically Edwardian statement of faith in engineering, but with over-familiar illustrations of the Ministry of Health in Rio, Lakeshore Apartments and the *Unité* at Marseilles. The same is not true of *The New Architecture and the Bauhaus*. Not only is the blunt impact of Morton Shand's pugnacious translation left unbuffered, but the new edition has been printed directly from the standing type of the old, on the same size page, on the same quality paper, and in the same wrapper by Moholy-Nagy. The resultant impact is so forceful that the reader is transported violently back to the dogmatic 'Thirties, and takes in his stride such observations as

'So much for technique!—But what about Beauty?' as if they were the common coin of architectural commerce to this day. Gropius Unadorned hits us much harder than Lethaby with a New Look.

Gossip

In the November issue of *Vogue*, we read: 'PEOPLE ARE TALKING ABOUT... the Knightsbridge dustman who wears a discarded Lock riding bowler to protect himself from the bins and who rates the rubbish on his beat "Igh class—full of broken glasses"... Norfolk reeds and a thatcher going to America to put a new roof on Miss Pamela Woolworth's home... *Outrage*, a special issue of THE ARCHITECTURAL REVIEW, about the Subtopia that our beautiful green England may fast come to be—a sharp reminder that all of us (not only public bodies) have an aesthetic myopia about the country we love...'

Although this is what we expect, we are sincerely touched by the right-minded attitude of the Bright Young Things. We may weep together over the fact that the people who matter in this context are not ourselves, but the self-styled Things in Suburbs (see the review of *Outrage* in *The Croydon Advertiser*); and they regard us, along with the broken glass, as high-class rubbish.

John Rodker

John Rodker, who died aged 61 in October, was a poet first, a publisher later. The boundary line between the two parts in his life runs about the year 1925. He contributed to *The Egoist*, *The New Age* and other journals, was a friend of Ezra Pound and published some T. S. Eliot as early as 1920. His publishing was done under various names: Ovid Press, Imago Press, Pushkin Press. It was never extensive and always idiosyncratic. He published the English edition of *Restif de la Bretonne's Monsieur Nicolas*, Powys Mathers's translation of *The Thousand and One Nights*, much psycho-analytical material including an edition of Freud's works in German to replace what the Nazis had burned, and also—which in the obituaries published after his death has not been sufficiently stressed—Le Corbusier's *Vers une Architecture* and *L'Urbanisme* as early as 1925 and 1926. Both books were translated by Mr. Frederick Etchells. John Rodker was quiet and unassuming, yet of great personal fascination and not without authority; extremely widely read, and neither born for, nor running after, success.

Hans Knoll

Few personalities can have been quite so characteristic of furniture design and interiors in the post-war years as Hans Knoll. Though a German by birth, he will be remembered as one of the key figures in the epoch in which America returned a compliment to Europe, and having absorbed what the old world could teach her about design, gave it back increased ten-fold through such mechanisms as Hilton Hotels, U.S. Embassy buildings—and Knoll International. It was in Cuba, on business in connection with Knoll International Havana, that Hans Knoll met his death in a car accident, and his presence there was typical of the world-wide penetration of his commercial activities, in the wake of the spreading reputation of his products. Although Knoll Associates, the

unique organization which bracketed designers into the firm almost as full partners, was formed in 1946, the Hans Knoll Furniture Company dates back to 1938, the year of his arrival in the USA, and before that he had been president of Plan, still remembered as pioneers of contemporary furniture in England. Through Knoll Associates he commissioned work from nearly every major furniture designer, and furniture from many great designers in other fields—he put Mies van der Rohe's *Barcelona* chair back in circulation, introduced various sculptors—Bertoia, Noguchi—to the field of furniture, brought Albini into the American field and, most notably, put on the market Eero Saarinen's magnificent moulded plastic armchair which, with Charles Eames' famous chairs, was the true herald of the American renaissance of furniture design. He was only forty-two, but had built up a formidable reputation and a considerable commercial organization.

CORRESPONDENCE

To the Editors,

SIRS,—Dr. Pevsner's review of recent church art in Germany (ARCHITECTURAL REVIEW, October 1955) may be a necessary reminder of how backward most of the designs are which are placed in English churches by artists specializing in ecclesiastical art, but he ought to have mentioned that work of the same quality as the best in Germany is not entirely lacking. I enclose a photograph of an altar made last year by the sculptor Ralph Beyer for the Chapel of the Royal Foundation of St. Katherine at Shadwell.

Yours, etc.,

FRANCES RUMBOLD.

4, Stepney Green, London, E.1.

To the Editors,

SIRS,—It is difficult to quarrel with so disarming a critic as Dr. Pevsner, but I feel bound to point out an illogic in his review of my *English Mediaeval Architects* in your October issue. Dr. Pevsner sets out to clarify his belief in 'the essential anonymity of mediaeval architecture,' yet concludes that 'anonymity in the Middle Ages is not absence of designers, but either absence of sufficient information for designers to come to life as personalities, or absence of a sufficient demonstration of personality to make names essential for an understanding of style.'

Surely absence of information is not 'essential,' but merely accidental, anonymity; and equally surely, such an absence of information might occur in relation to any period, however full of demonstrable personality, owing to the haphazard destruction of records. If the names of Renaissance designers had been

lost, as indeed many of them have, understanding of their style would be (in some cases) only possible on a basis of analysis and attribution to specified 'Masters,' just as has been done in the study of painting.

What I ask is that the study of our mediaeval architecture should be pursued on the same lines until the limit of stylistic attribution (even if it be only to Masters X, Y and Z) is reached. Only then will it be possible to *prove* whether or not there is 'a sufficient demonstration of personality' to place Gothic architecture on precisely the same footing as that of other periods. Personally, I have not the slightest doubt that this demonstration of personality will then be forthcoming.

Yours, etc.,

JOHN H. HARVEY.

Little Bookham, Surrey.

Intelligence

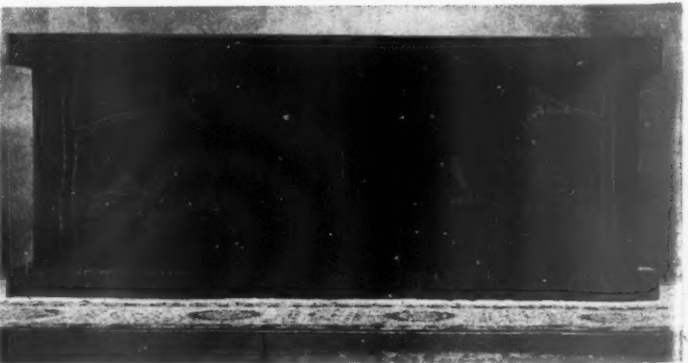
The Architects' Benevolent Society has announced details of a competition for the design of new dwellings for Old People at East Horsley, Surrey, to be submitted by 6th April, 1956. Two premia, of £100 and £75, will be awarded.

According to *Das Münster*, September-October, 1955, the City of Krefeld has made Mies van der Rohe's Langer House of 1928 an historical monument. It will now be looked after by the City authorities and probably used for exhibitions of modern art. In addition a Mies archive will be established in the house.

Mr. F. G. West has been appointed Deputy Architect to the LCC.

ACKNOWLEDGEMENTS

COVER: Galwey, Arphot. MARGINALIA, page 1: Jaoul, J. Stirling; page 2: altar, J. Gay. FRONTIS, page 4: Toomey, Arphot. PUBLIC BUILDINGS, page 11, top: City Engineer, Liverpool; page 13: Elsam, Mann & Cooper; page 14, top, Galwey; bottom and page 16, top, J. McCann; page 19: Galwey; page 20, Elder and de Piero. POWER STATIONS, page 27: LCC Housing, page 31, bottom: City Engineer, Liverpool; pages 34-5: Arphot; page 36: Galwey; page 40: Fox Ltd.; page 41: Galwey; page 42, top: Fox; page 44: S. W. Newbery; page 45, top: C. Tait; bottom, Briggs; pages 51-2, Galwey; page 53: Wainwright; page 56, top: M. Boys; bottom, Arphot. EDUCATIONAL: Elsam, Mann & Cooper; page 65, top: A. Cracknell; page 66: Wainwright. Architects, page 73: S. Lambert; page 74: Armstrong & MacManus, S. Lambert; Livett, Toomey; Kitson, Parish, Lidgard & Pyman, Toomey.



Altar, Royal Foundation of St. Katherine (see above).

THE ARCHITECTURAL REVIEW

Volume 119 Number 709 January 1956

SPECIAL PREVIEW ISSUE



The cover illustrates a model of a block of maisonettes at Picton Street, one of the London County Council's newest housing sites in Camberwell (see pages 36-37). It is one of fifty-two projects, at present under construction or shortly to begin, illustrated in this third special Preview issue of the REVIEW.

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5 Foreword

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- 10 Multi-Storey Car Park: Liverpool Ronald Bradbury (*City Architect*)
- 11 Church Hall: Surbiton Kenneth Wood
- 12 Swimming Bath: Wythenshawe Leonard C. Howitt (*Manchester City Architect*)
- 15 Telephone Exchange: City of London Ministry of Works
- 15 Police Station and Court: Harlow Frederick Gibberd
- 16 Police Station: Birmingham A. G. Sheppard Fidler (*City Architect*)
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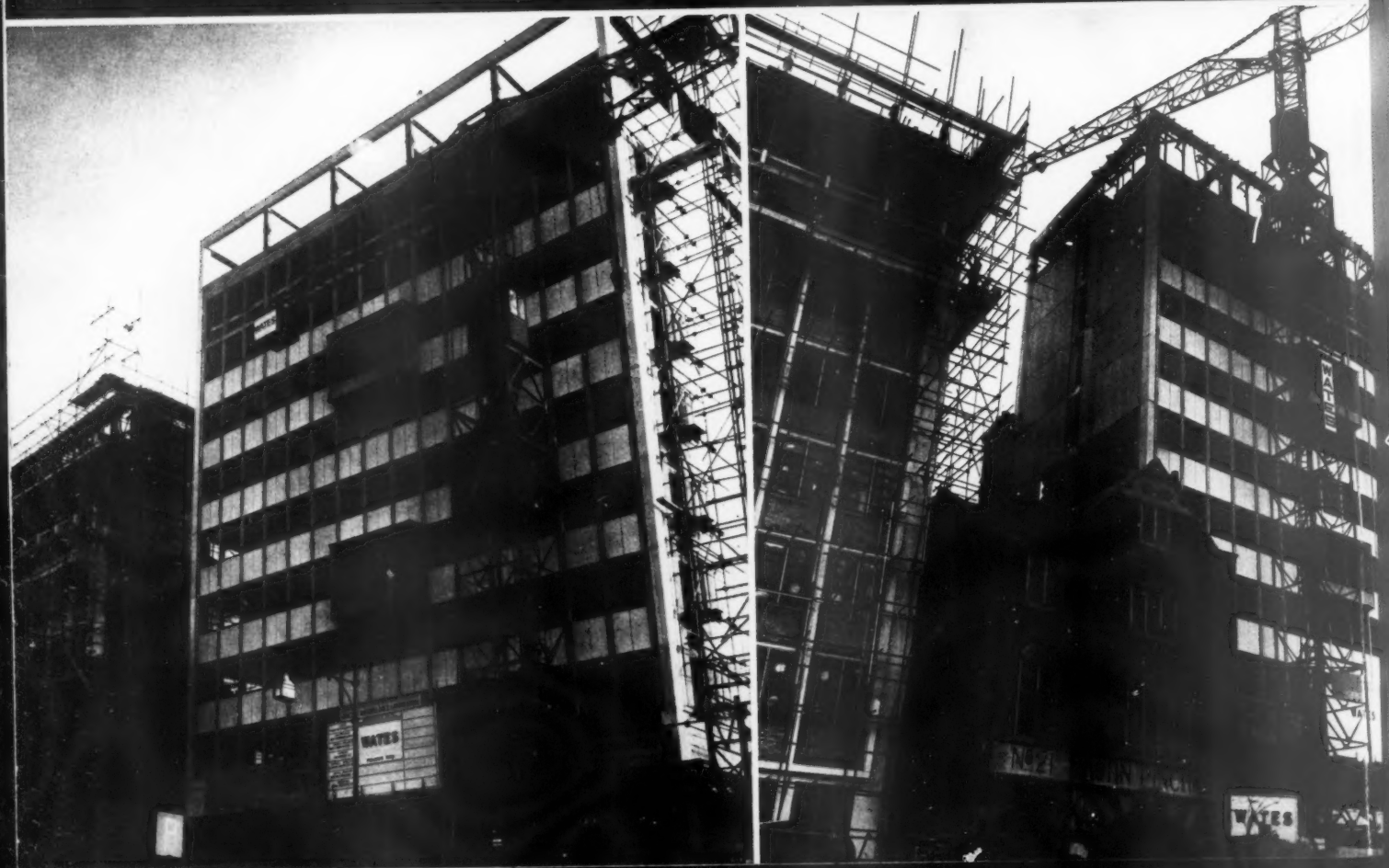
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THE ARCHITECTURAL REVIEW

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FIVE SHILLINGS



The Preview issue of the Review, now an annual event, is not concerned with architects' dreams but with actual building projects which, at the time of publication, are either already begun or shortly due to begin.

Opposite  are two of the projects that were illustrated in the corresponding issue to this a year ago and are already well on the way to completion: two office buildings on the Albert Embankment, London, by T. P. Bennett and Son, and by Frederick Gibberd. Top, from the railway; bottom, from the riverside roadway.

FOREWORD

Whenever the question is asked: how can the quality of contemporary architecture be improved? one answer—perhaps one among several, but one of the most important—must always be: by building and yet more building. The practice of their craft is the only thing from which architects can really learn, whatever the pedagogues may say and do, and the difficulties modern architecture has experienced in the last few years in evolving for itself a mature, universally applicable idiom, one that goes beyond the mere exploitation of technical novelty and is capable of carrying a coherent message to the eye, have largely arisen from the restrictions the national economic situation has imposed on building.

Architectural practice has been limited to a very few types of building, and to those in quantities far short of what are needed. Architects' imaginations have been stifled by having to plan for cheapness and little but cheapness. They have had to develop a minimum mentality. But now at last there are signs of better opportunities ahead; indeed in the foreword to the equivalent issue to this one, published a year ago, it was already possible to record the abandonment of the war-time system of building-licences and to express the hope of a far less restricted field of architectural practice in the immediate future. Those hopes have been fulfilled. Architects are engaged on a greater variety of buildings than at any time for nearly twenty years. This issue, for example, begins with a section devoted to public buildings, of which there were quite a number to choose

from—a year or two ago there would have been none—and other sections illustrate power-stations, university projects and office and commercial buildings, all of which are being designed and executed on a substantial scale.

If the architectural profession as a whole is now entering a period of several years during which building in real quantity, unrestricted as to variety, is allowed to go forward (and what is more important if the main sphere of activity is to be transferred from the drawing-board to the site), then the right conditions are being created for a steady increase in architectural competence, and the opportunity is being created to transform the somewhat tentative and esoteric idiom of modern architecture into a universal idiom possessing the rich variety of resources that term suggests. Cost remains, of course, a dominating consideration, but within limits the need to watch costs provides a valuable discipline and encourages the original, rather than the routine, solution. Granted the continued need to keep down the cost of individual buildings, the picture as a whole has changed radically in the last year or two, whether we assess the situation in terms of the money being spent or in terms of the number and size of new projects.

If it is thought that to say so is to paint too rosy a picture, let some figures indicate whether or not the present time deserves the title of a building boom—anyway in comparison with the post-war years. In 1949 the total amount spent on building and civil engineering works was 1,198 million pounds. It has been rising steadily since, especially in the last three years, and the 1954 figure was 1,858 million pounds. The 1955 figures are not yet available, but there is no reason to believe the increase is not continuing. What is more, of the 1949 total, 575 million represented new work; of the 1954 total 1,149 million represented new work. So if this only is taken into account (and it is new building projects, under construction during 1955 and 1956, that we are particularly concerned with here), the figure during these five years has been almost exactly doubled.

A building boom is of limited value to the development of better architecture unless it offers the opportunity to experiment. The projects illustrated on the following pages indicate no lack of such opportunities in present-day practice. New avenues are constantly being opened up, which are giving architects the chance to widen their range of expression at the same time as they increase their experience. Some of the projects represent well-established types of building—theatres, civic offices, swimming-baths, hospitals and the like—which circumstances have prevented our constructing since the war; others represent altogether new types of building—multi-storey parking garages, for example—which attempt to solve problems that have only recently come to the fore. And while new avenues are opening, they are not doing so at the expense of old ones; the types of building to which architects have been compelled to give most of their attention lately continue to be in great demand—in fact in even greater demand. The number of houses completed in Britain (excluding Northern Ireland) rose from 197,627 in 1949 to 347,605 in 1954—not all, unfortunately, designed by architects, but the figures give an idea of the rate at which building activity increased and is still increasing.

The number of new industrial buildings completed in 1949 was 1,006 (giving a floor-area of twenty-one and a half million square feet); the number begun was 1,330 (area, over thirty-two million square feet) and the number of new industrial buildings approved was 2,442 (area, nearly sixty million square feet). So the increase in activity was already showing itself then. But by 1954 the number completed had increased

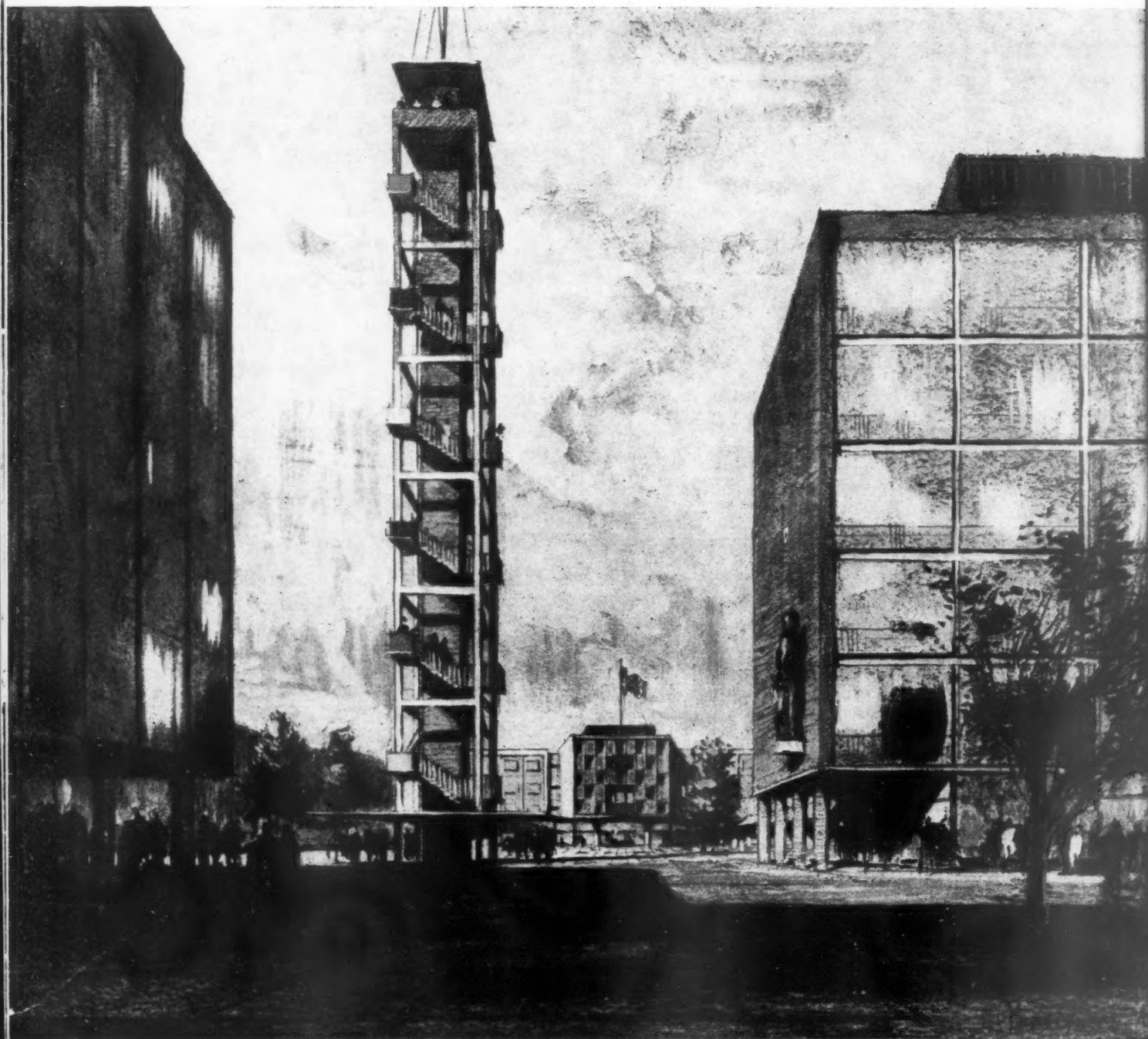
to 1,702 (area, thirty-eight million square feet), the number begun to 2,131 (area, forty-five million square feet) and the number of new projects approved to 2,705 (area, not far short of seventy-one million square feet). As regards educational building, the value of primary and secondary schools approved rose from £14,657,000 in 1948 to £51,286,000 in 1954, and of other schools from £246,000 in 1948 to £1,258,000 in 1954. Moreover, in the first five months of 1955, the figures were £46,124,000 and £1,938,000 (as against £39,584,000 and £850,000 for the same months of 1954); so here again the increase in activity is continuing, for the rising figures of new buildings *approved*, industrial as well as educational, represent a greater number of buildings in the contract or constructional stage at the moment of writing.

It is this mixture of widening experience of familiar paths and the chance to branch out along new ones that makes the present such a moment of opportunity. The projects on the following pages represent those most worth noting of the many that architects are engaged upon. So, as well as giving the news of important new buildings, this issue serves the purpose of enabling the present generation of architects to judge how successfully they are seizing this opportunity and to see in what direction they are leading the rest of the profession.

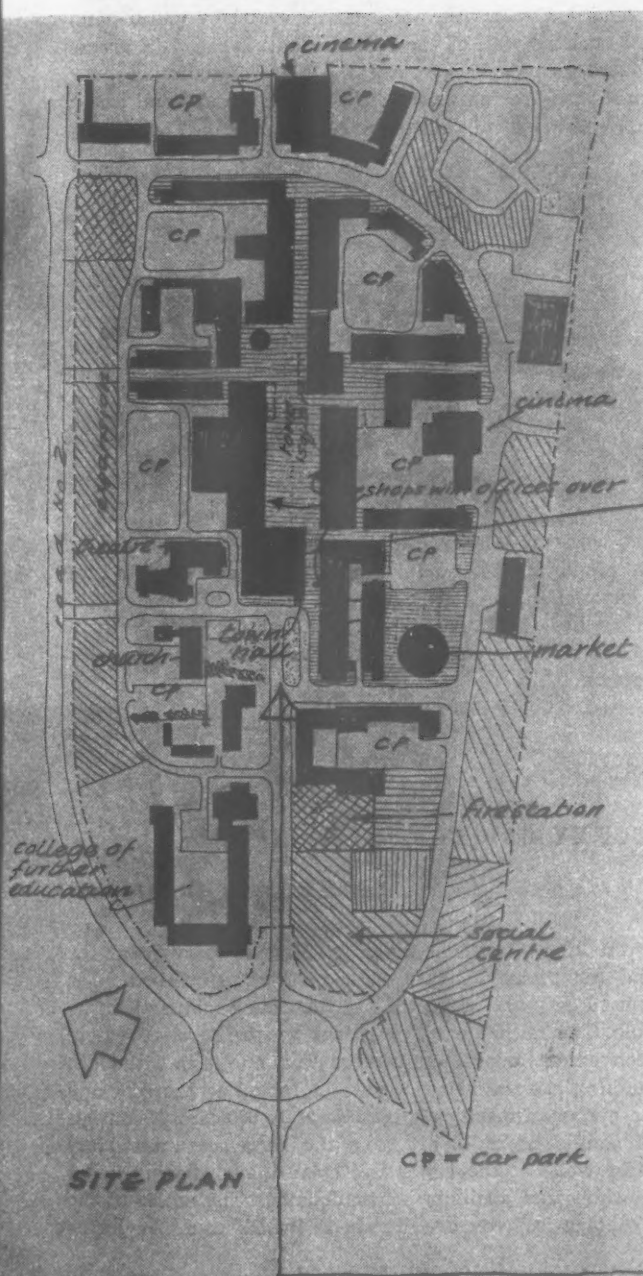
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PUBLIC BUILDINGS

Preliminary sketch for the town centre at Basildon new town, looking into one of the squares, which will be for pedestrians only. In the foreground is a clock-tower. The drawing is by Basil Spence, who is consultant to the development corporation for the central area.



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TOWN CENTRE: BASILDON

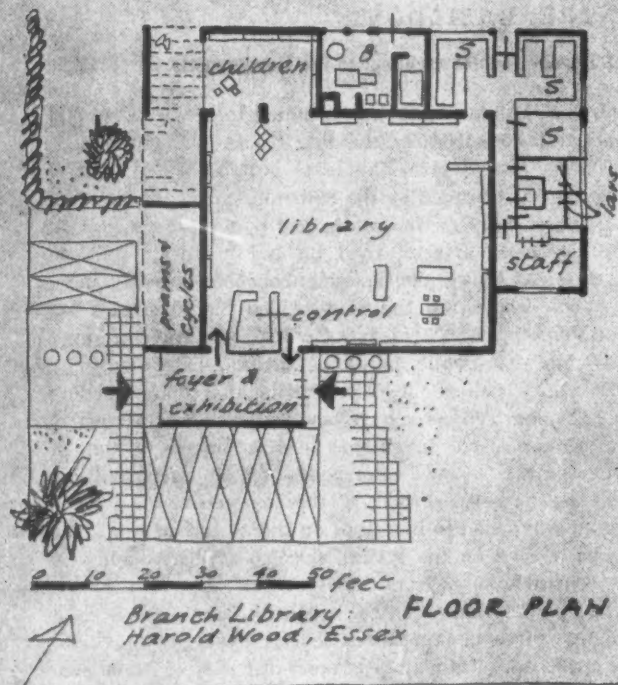
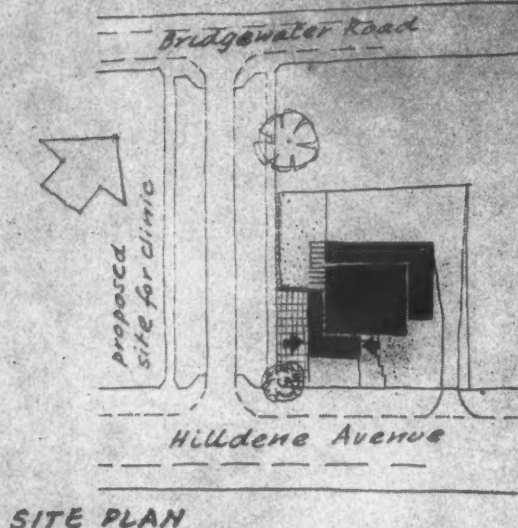
Noel Tweddell (chief architect to the Development Corporation)

The town centre of Basildon is being designed to serve a regional population of about 130,000-150,000, including the in-town population of about 100,000. The site lies on the level bottom of the central basin of the town and is bounded by the embankment of the London-Upminster-Southend railway on the south, and by a new major road looping off the Southend arterial road on the north. It will be surrounded on all sides by residential neighbourhoods having independent spine roads leading to the centre. The plan provides for 300,000 sq. ft. of shopping, 85,000 sq. ft. of offices, a market, a small number of flats, and for public buildings including a town hall, church, cinemas, and a college of further education; also parking space for some 2,000 cars. Ten acres have been reserved for expansion. The commercial section of the layout has been arranged so that all shops within the central 'island' have pedestrian approach only in front and car parks and service roads at the rear. From the central squares, pedestrian ways lead to bus stops on the perimeter road. The town hall may be opened on the ground floor to give a colonnaded approach to the central squares from the ceremonial way on the west side. A clock tower in the main central square will be a focal point in the predominantly three- or four-storey development.

Buildings are expected to be mainly of steel or concrete frame construction. External cladding will be in stone, brick and glazed curtain walling. The frame construction will be allowed to dictate a certain



1. PUBLIC BUILDINGS



formality in design, but extensive use of colour will be encouraged.

The design illustrated has not yet received Ministry approval, but it is hoped to start on the first section of the town centre this summer. Deputy chief architect: Anthony B. Davies. Senior architect: John N. Graham. Consultant: Basil Spence.

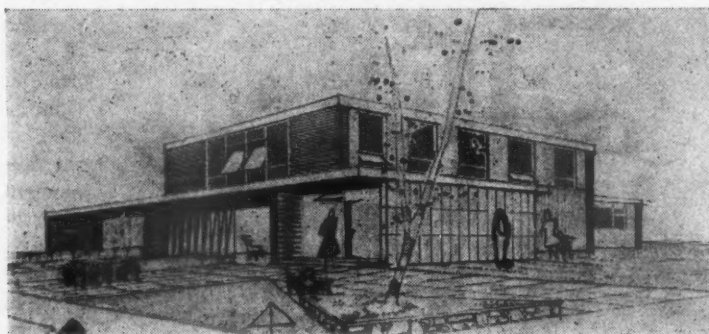
BRANCH LIBRARY: HAROLD WOOD, ESSEX

H. Conolly (County Architect)

The first of a number of branch libraries of a similar size to be built in Essex by the county council. It is in Hildene Avenue on the new LCC estate of Harold Wood, near Romford.

Bookcases are confined as far as possible to the walls, the only island fittings being those used to form a reference section. The central space contains tables and easy chairs. The children's library has a lower ceiling (8 ft.), so as to be in scale with child height. A glazed screen gives access to a paved outside reading area, and a view on to a rendered wall, which will be decorated by mural painting. The blank external wall of the entrance hall is faced in precast concrete slabs and forms a background to a piece of sculpture.

Construction is load-bearing brickwork, concrete beams and timber joists, carrying 2-in. thick building board as a roof deck. The latter is



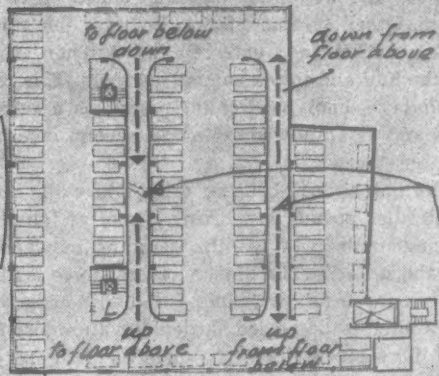
surfaced direct with three-layer bitumen-bonded felt, finished with in-situ granite chippings. The underside of the building board and the joists is left exposed in the lower portions of the building, whilst the main library has the underside of joists closed with acoustic board. The floor of the main compartment is wood block; the remaining floors are plastic tile.

Work is expected to begin this month or next.

MULTI-STOREY CAR PARK: LIVERPOOL

Ronald Bradbury (City Architect)

The first of a number of similar buildings planned to augment the existing official car parks, which consist mainly of bombed sites, and are being used only until such time as rebuilding makes them no longer available. The multi-storey car parks are to be sited where they will be convenient to business centres. This one is in Tithebarn Street. The building has seven parking floors, including the roof and two basements, giving a capacity of approximately 600 cars. It consists of a series of simple decks (apart from the shop accommodation) with low barrier walls at the edges and open above, glazing being confined to the shops and ancillary accommodation. The whole of the ground-floor frontage is given over to shops (which could be let as



UPPER FLOOR



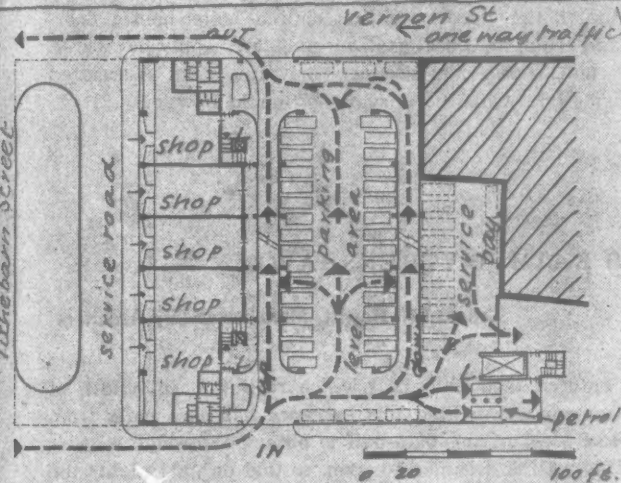
five separate individual shops, or as one or more larger shops) except for an area set aside as a service bay with petrol pumps and the usual facilities. Vertical circulation for cars within the building is by means of single-way straight ramps at a slope of about 1:11. Two parallel sets are provided 55 ft. apart, so that a continuous circular traffic movement can be maintained up and down, traffic in each direction progressing from one tier of ramps to the next at each floor level. This method causes the minimum of interference with the traffic moving into the parking bays. Three staircases and two passenger lifts are included for access to the parking floors. The entrance and the exit are on opposite sides of the building, though at quiet periods it is proposed to use the entrance for both purposes.

Construction is reinforced concrete throughout. Provisional Ministry approval has been received, and work leading to the invitation of tenders is in progress. In preparing the scheme the City Architect has worked in conjunction with the City Engineer and Surveyor.

CHURCH HALL: SURBITON

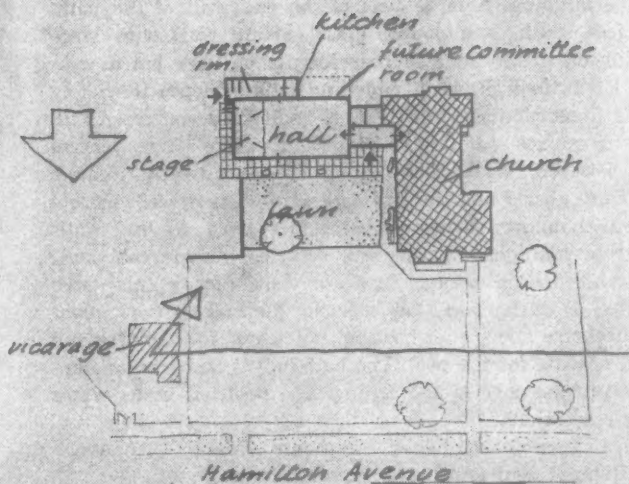
Kenneth Wood

To release the existing hall-church of St. George's, Tolworth, so that it can fulfil the purpose of a church exclusively. The site is fronted by a large open space which is to be developed as gardens. The side of the hall overlooking this space is fully glazed and there are high-



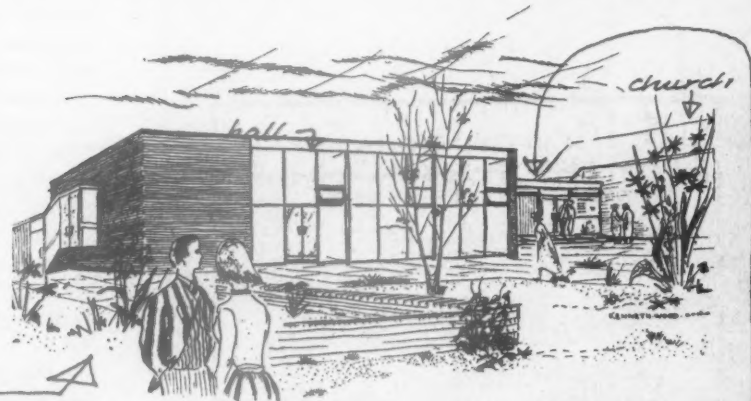
GROUND FLOOR

Car Park: Liverpool

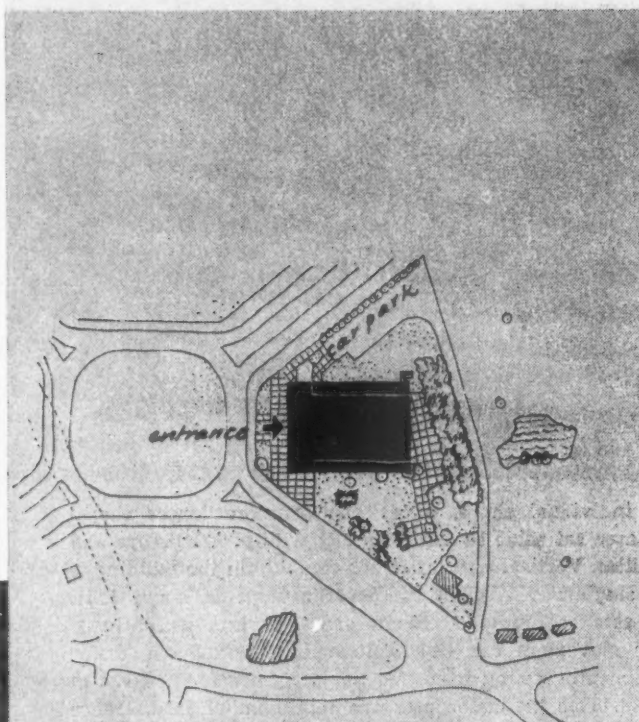


SITE PLAN

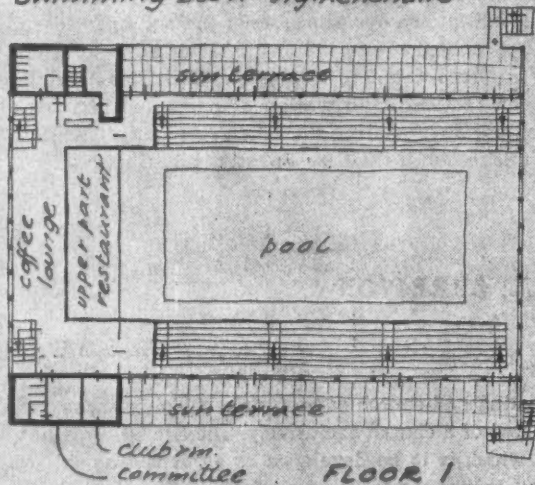
Church Hall: Surbiton



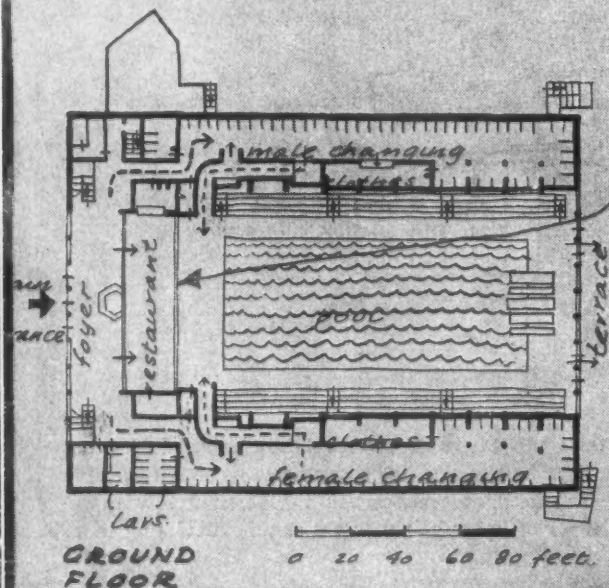
level windows to the south where the site abuts the backs of pre-war suburban housing. The hall, which is to serve many activities and seats 250, has been placed at right-angles to the church with a common entrance foyer of lower height to act as an articulating link



SITE PLAN
Swimming Bath, Wythenshawe



FLOOR 1



GROUND FLOOR

between them. This link also includes lavatories for both sexes, it being intended to use the adjoining existing ladies' vestry as an occasional cloakroom. Other accommodation includes the stage, with storage space under, backstage lavatories and kitchen, the latter serving direct into the hall and into a committee room. This room will also be used for Sunday school, as dressing-rooms, as a refreshment room during dances and as a midweek clinic. A second meeting room will be added at a later stage.

Construction of the hall is load-bearing brick end walls and intermediate laminated timber portals supporting a roof of tanalised prefabricated timber trough units in 4 ft. widths, spanning between the portals and containing the services. The other elements have load-bearing brick walls or load-bearing insulating block faced with cedar boarding left natural, with framing to the glazed garden elevation also in cedar. Drainage is in pitch fibre pipes. Roofs are surfaced with spar-finished built-up felt, and the floors are of polyvinyl or, if finance permits, woodblock in the hall itself. Heating is by low-pressure hot water from a solid fuel boiler in the existing church boiler-house, floor-panel heating and radiators. Local gas water-heaters supply hot water.

Work on the hall is expected to start early this year. Associated architect: Henry Blyth. Quantity surveyor: Donald Sawyer.

SWIMMING BATH: WYTHENSHAW

Leonard C. Howitt (Manchester City Architect)

The bath is entered through a hall which runs the full width of the building. Immediately behind this entrance hall is a café, from which a complete view of the bath-hall is obtained through a glass curtain wall. This wall is designed to open, so that on gala nights the café area can be thrown into the bath-hall. The dressing accommodation for bathers is directly accessible from the entrance hall and has been placed in the space immediately below the two terraces of permanent seating which run the full length of each of the two longer sides of the bath-hall. Permanent seating is provided on these two terraces for approximately 1,100 spectators, and this can be increased by a further 150 by placing one row of chairs in front of each bank of permanent seats. There are 140 dressing cubicles, in addition to the space allocated for the use of school children.

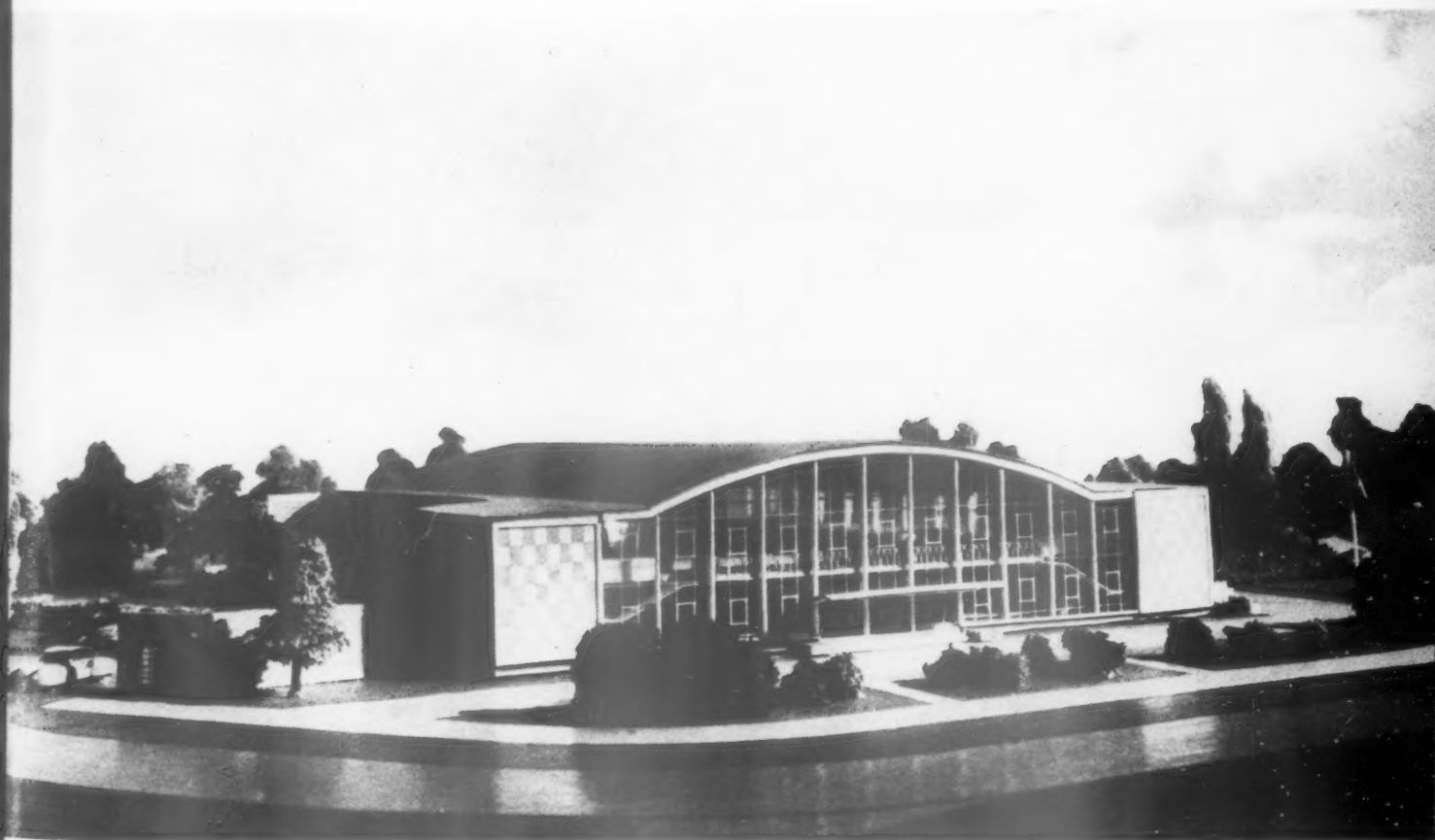
Staircases lead off the entrance hall to the spectators' seating, the committee room, club room, promenade lounge, kitchen and lavatories, all of which are at first-floor level. The kitchen is served by a goods lift and separate staircase, connected with the staff entrance on the east side of the building. A large part of the end wall of the bath-hall, which faces south, is a double glass curtain wall with large openings, giving on to the lawn at rear for use on very hot days.

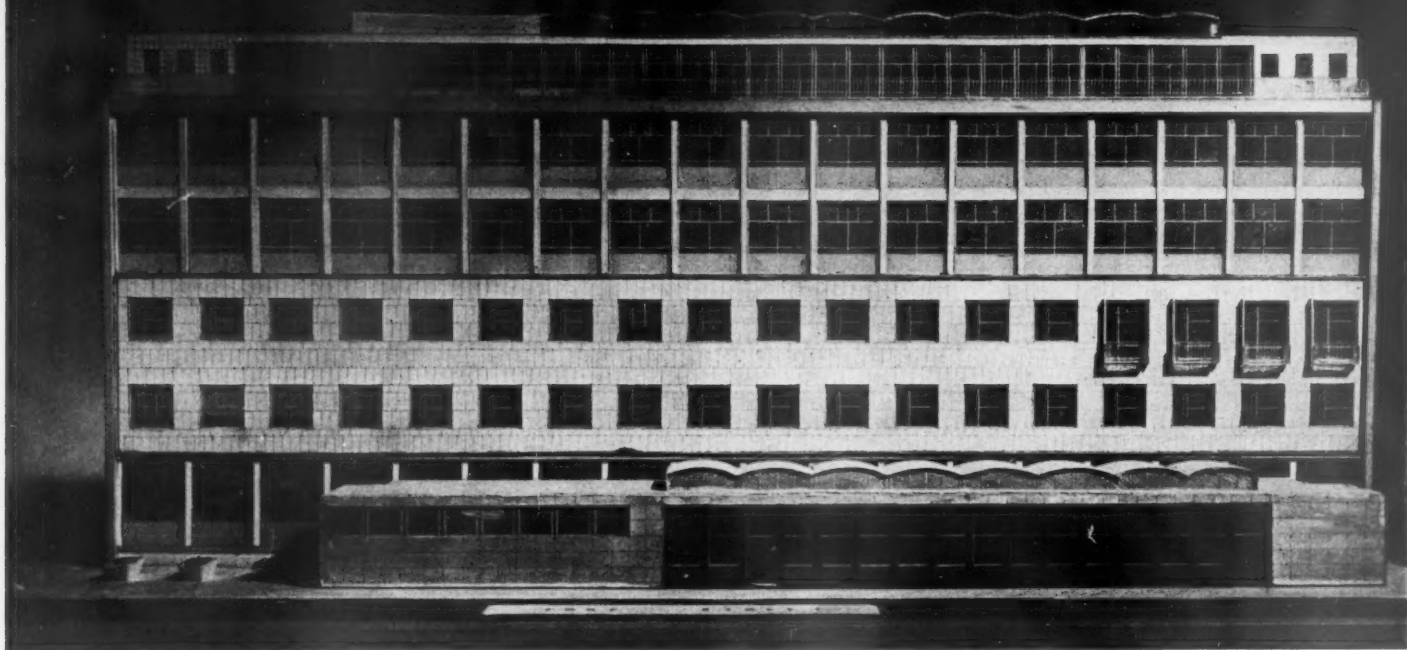
The pool is 110 ft. long by 48 ft. wide and falls in depth from 3 ft. 3 in. to 12 ft. Construction throughout is reinforced concrete, with ribs at 13 ft. 4 in. centres spanning the bath-hall, with precast concrete ceiling units between. Walls and ceiling are acoustically treated. The side walls are glazed and the end walls glazed between concrete mullions. The changing rooms have prefabricated timber walls between concrete mullions. Engineering services include the usual filtration and chlorination plants. Separate ventilation plants serve the bath hall and restaurant. An electric thermal storage plant provides low-pressure floor-panel heating, hot water for showers and foot baths and heating for the pool. The bath-hall is lit by fluorescent tubes concealed in the cove of the ceiling. The pool has under-water lighting for gala occasions.

Construction is expected to begin this month. Deputy City Architect: S. G. B. Roberts. Assistant in charge: G. Carter.



Covered swimming-bath at Wythenshawe, Manchester, by the city architect. Above, from one side of the triangular site. Below, the main entrance front.





Above, telephone exchange at Moorgate, in the City of London. The lower building in the foreground is a post-office.

1. PUBLIC BUILDINGS

Below, police station and magistrate's court-house at Harlow new town. The buildings shown in block form behind are the proposed Crown offices and a block of offices for professional purposes.



WHEEL

SPALL

MAIN
FRANC

CRANE

Cross
off

TELEPHONE EXCHANGE: CITY OF LONDON

Ministry of Works

A main telephone exchange in Fore Street, E.C.2, together with a branch post-office planned as a single-storey block on the Fore Street frontage. There is a frontage of about 220 ft. on the north side of Fore Street at the corner of Moor Lane and bounded on the north by Moorgate Station. The site is part of the devastated bomb-damaged area to the west of Moorgate.

The branch post-office has a counter length of 72 ft. and the usual enquiry, accounts and clerical rooms. The telephone exchange has five main floors above ground on the Fore Street frontage and six floors above ground in the rear block adjoining Moorgate Station. Approximately 29,000 sq. ft. of floor space will accommodate automatic exchange equipment, 7,500 sq. ft. will be occupied by manual board switchrooms and a further 3,600 sq. ft. will be given over to training; the fifth floor consists entirely of welfare accommodation and the remainder of the space above ground is to accommodate ancillary clerical staff. A cable chamber of about 4,500 sq. ft. will occupy part of the basement whilst the remainder will accommodate a telephone linesmen's service centre reached by means of a ramp from Moor Lane. There is a sub-basement under part of the building. The main entrance to the exchange is from Moor Lane. There is a staff entrance from Fore Street Avenue.

The building is of reinforced concrete frame construction, faced with Portland stone. The one-storey block, on the Fore Street frontage, is faced in polished slate; this same material is used at the main entrance in Moor Lane and for the sub-frame of the Portland stone panel on the Fore Street frontage. Faience tiling is proposed for facing tank rooms, lift enclosures, etc., at main roof level; opaque coloured glass is introduced to add colour in the lower panels of the glass infilling at third-, fourth- and fifth-floor levels.

Approximate starting date is March, 1956. Senior architect-in-charge: G. R. Yeats.

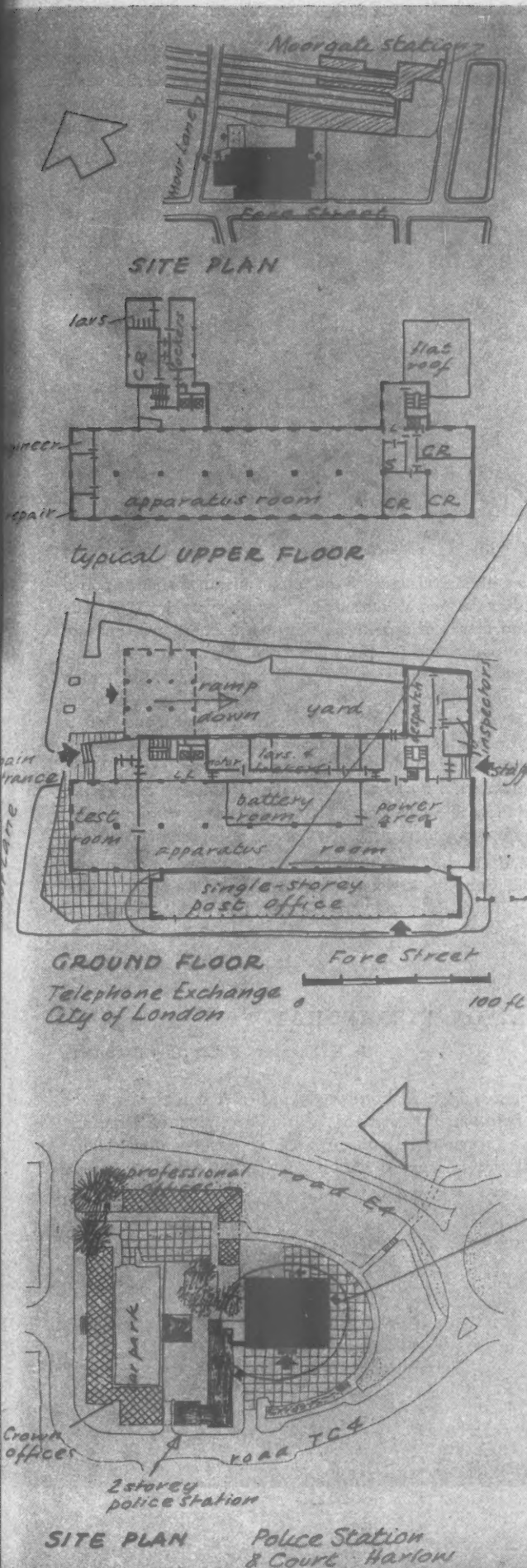
POLICE STATION AND COURT: HARLOW

Frederick Gibberd

These two buildings form part of a group on the south-east corner of the town centre, which also includes the Crown offices and professional offices. The buildings of the group are arranged informally round a series of internal courts, care having been taken to preserve the existing trees. The police station and magistrates' court house are planned round a forecourt which also serves as a car park, the whole being raised on a podium which takes up the contours of the existing ground level.

Magistrates' Court House Two courts are placed side by side, separated by the prisoners' waiting room. The prisoners' approach is through an underground passage and up a staircase which lands between the two courts. There is a circulation corridor all round the courts on three sides. This allows free access to all parts of the courts at all times. Surrounding the corridor are suites of offices for the solicitors, probation officers and other officials, with lavatory and ancillary accommodation.

The two buildings are faced with reconstructed Portland stone panels, with limited amounts of brick walling. The court house is a single-storey structure, through the centre of which the two court roofs penetrate to form a clerestory. The elevation facing the forecourt is largely glazed in metal screens. The frame is reinforced concrete, painted where exposed. Floor beams are precast concrete. Court

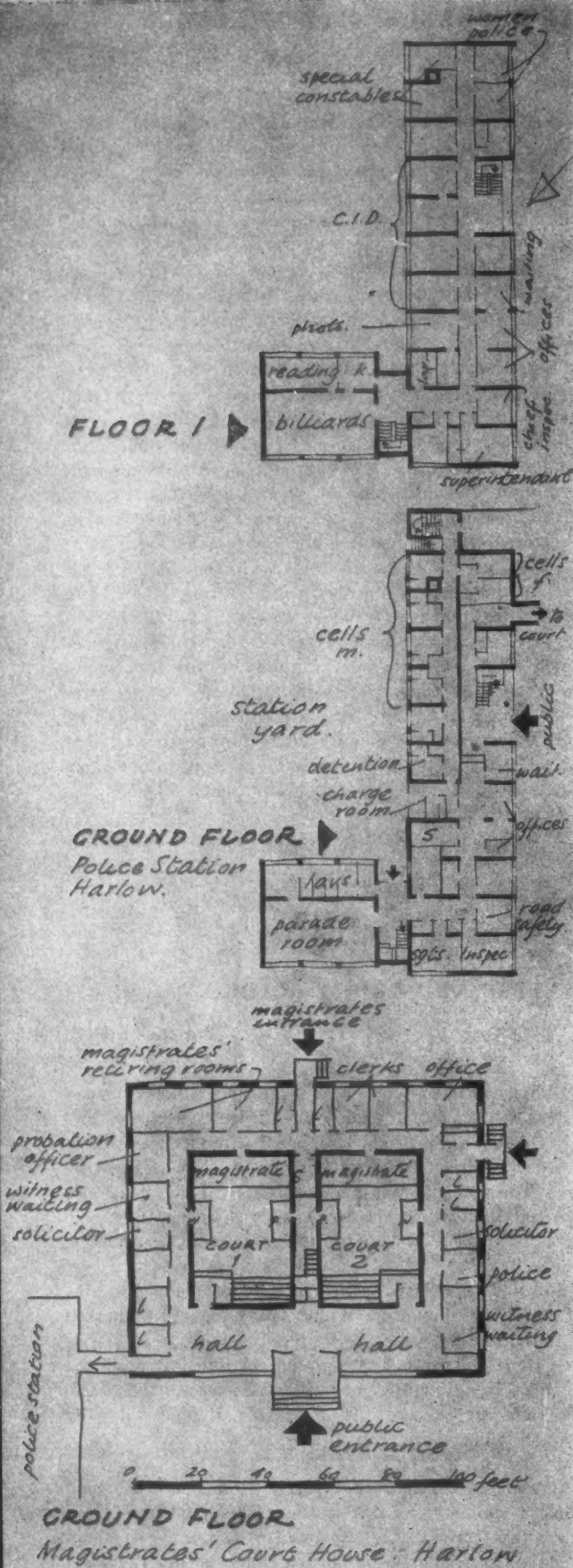


1. PUBLIC BUILDINGS

FLOOR 1

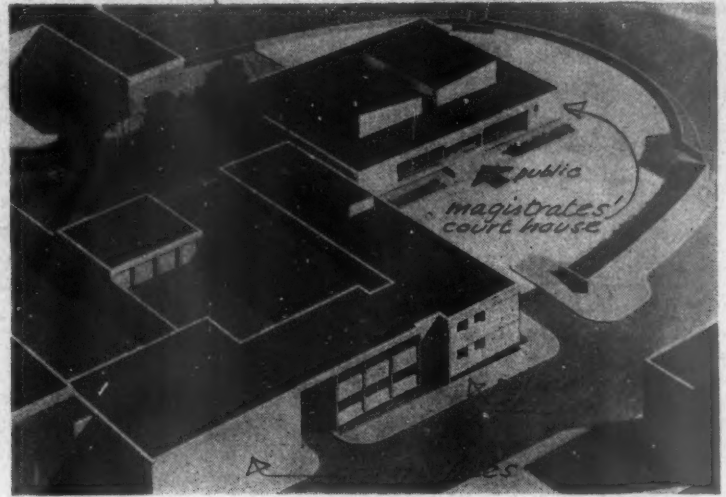
GROUND FLOOR

Police Station Harlow.



roofs have steel trusses. Heating is by low-pressure hot water, with hospital-type radiators.

Police Station. This is a divisional station with an L-shaped plan, the long leg of which faces the forecourt on the south and the short leg faces the town road on the west. The internal angle is utilized as a station yard and accommodates the garage block. The building



is of two storeys with staircases near the public entrance and the police entrance hall. Offices are on either side of a central corridor. The cells are on the ground floor and face the station yard. There are separate entrances for the police and for prisoners from this yard.

The constructional system is weight-bearing cross walls, which occur at 11 ft. 3 in. centres. The end face of the brick wall projects and forms the reveal into which the windows and the stone panels are fitted. The plinth is painted brickwork and the cornice consists of a continuous band of polished stone. External walls are grey facing bricks with reconstructed Portland stone panels. Windows and glazed screens are metal, with some small pivot-hung wood windows. The staircase is reinforced concrete. Floor beams are precast concrete.

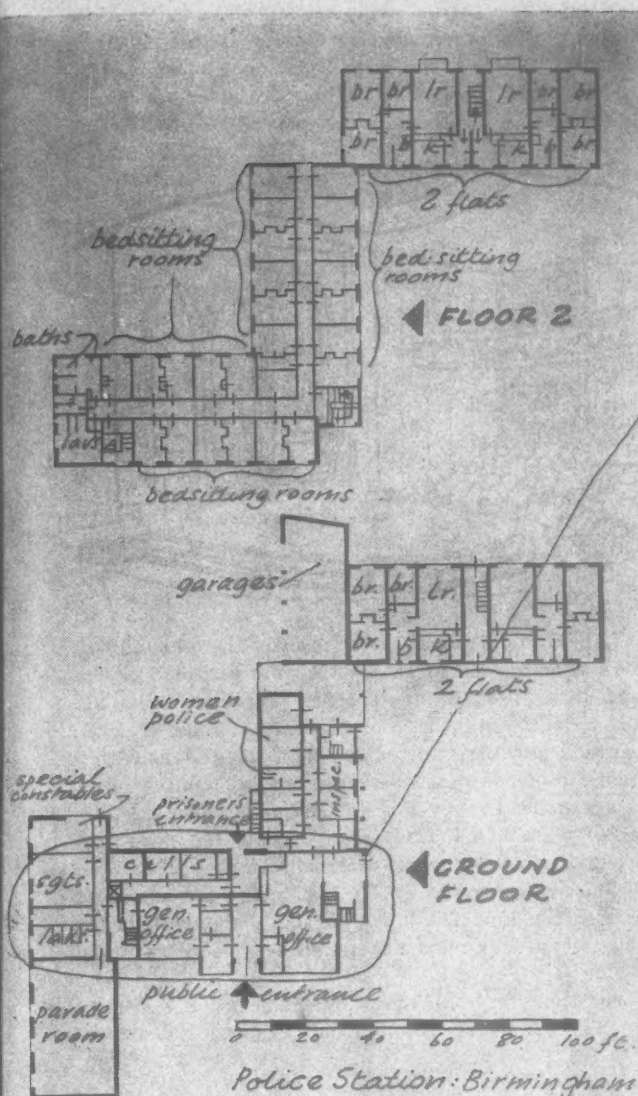
Work has already begun. The buildings were designed in collaboration with Harold Conolly, Essex County Architect. Associate architect: F. Darnell. Quantity surveyor: Oswald E. Parratt. Structural engineer: F. J. Samuely.

POLICE STATION: BIRMINGHAM

A. G. Sheppard Fidler (City Architect)

A sub-divisional police station occupying a triangular site of approximately half an acre, created by the diversion of Bradford Street across a previously built-up area to meet future traffic requirements. It contains extra accommodation for training; also a





Police Station: Birmingham

flat for the inspector, six flats for married staff, 37 bed-sitting rooms for single constables, separate dining and kitchen facilities for residents and non-residents, and a shared recreation room. The plan consists of two linked L-shaped blocks with the main staircase marking the point of junction. To the north of this point is the main four-storey block and to the south a three-storey block containing all the flats, 13 of the bed-sitting rooms, a quiet room for study and a certain amount of office accommodation on the ground floor, with a covered way leading to garages and to the drill yard at the rear.

The main block has a steel frame, with a two-storey end wing in load-bearing brickwork, while the south block is of load-bearing brick construction throughout. The external colouring relies on contrasting materials used in large areas. Brickwork generally is in light buff facings with dark brown brick on the gable walls. At the north-western end of the main façade a panel of red brickwork acts as foil to the remaining wall area faced in greenish-grey textured faience slabs, varied by Portland stone slabbing on the return face by the main staircase.

Work on the building has already begun.

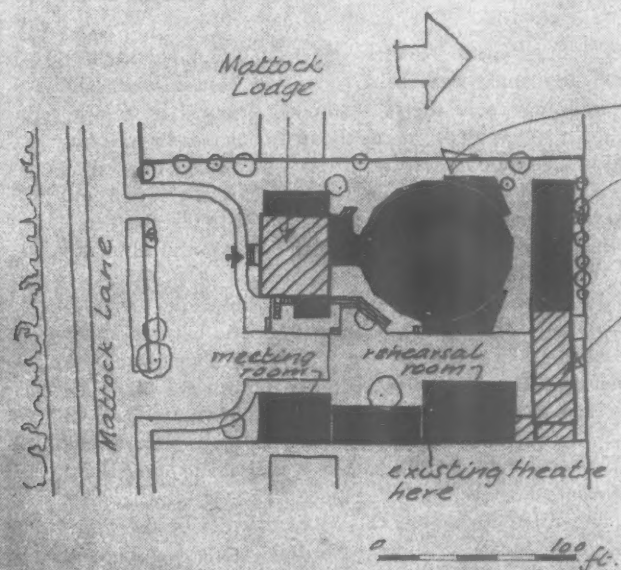
THEATRE: EALING

W. S. Hattrell and Partners

The Questors Theatre, Mattock Lane, Ealing, is a club theatre founded 25 years ago for the production of new plays and of new forms of theatrical presentation. The new building has been designed in the light of the club's experience and of its need for a new form of playhouse which will provide a flexible arrangement of stages capable of presenting plays of any period in a contemporary manner. The club is at present using a timber-framed structure clad in corrugated steel as its theatre, a brick building at the rear thereof as a green room, workshop, paint store, wardrobe and office, and Mattock Lodge, a Victorian house, partly as clubrooms and partly let as bed-sitting rooms. The manager's flat is also in this house. It was required that the new accommodation should be capable of separate construction, and for reasons of economy it was decided that the workshop block and Mattock Lodge be incorporated within the development scheme. The theatre, moreover, must remain in use as long as possible, and the building is planned in such a manner that the construction of each new unit will not interfere with the function of the existing theatre, but will add immediately to the club's amenities.

The new playhouse is placed to the west of the existing theatre upon a north-south axis, enabling Mattock Lodge to be replanned as the theatre entrance. The new (dressing-room and wardrobe unit) is sited to the north of the theatre and connects on the east directly with the existing workshop block. The new rehearsal room, foyer, cloak-rooms and a small meeting room are planned along the eastern boundary of the site in order to provide a 24-ft. wide access road from Mattock Lane. The house has been replanned to provide the main entrance and foyer to the new playhouse, together with manager's office, committee rooms and cloakrooms. Additions thereto accommodate a servery, w.c.s and a new entrance to the manager's flat. The first floor has been designed as club premises and the basement rooms will be utilized as stores. The main stairs to the new theatre balcony are placed with a circulating area between the lodge and the theatre which also forms a fire-lock between the two buildings.

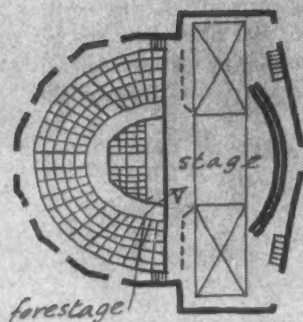
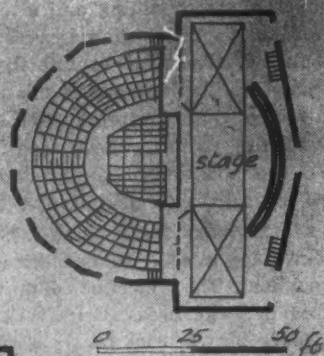
The playhouse is designed for five main uses and to be capable of many variations within and between such uses. These are: proscenium stage (seating capacity 337); proscenium stage with fore-stage extending over the pit area (seating capacity 315); open stage



SITE PLAN:
Theatre: Ealing

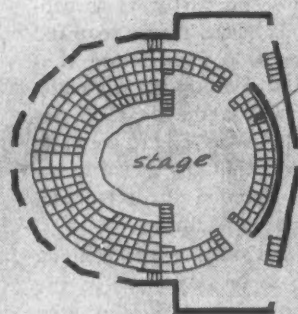
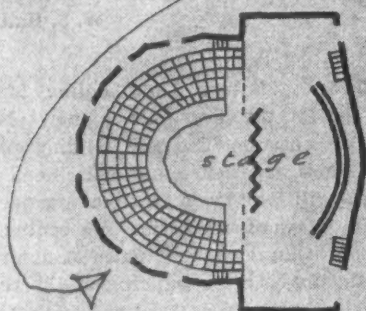
1. PUBLIC BUILDINGS

① PROSCENIUM STAGE



PROSCENIUM WITH FORESTAGE ②

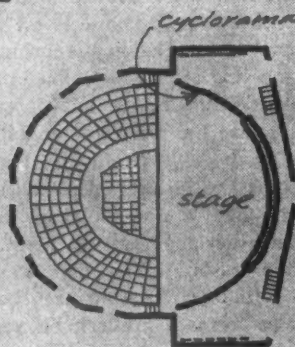
③ OPEN STAGE



Seats introduced on main stage area

ARENA STAGE ④

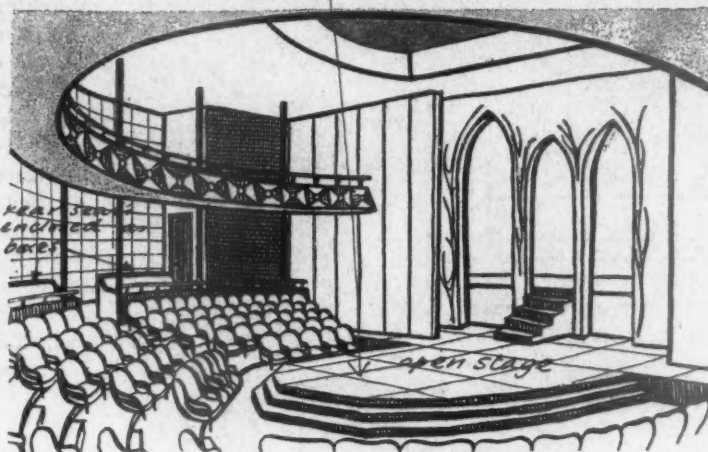
⑤ SPACE STAGE



AUDITORIUM PLANS showing flexible arrangement of stages.

Theatre: Ealing

constructed over the whole pit but with extra seating at the sides of the stage (capacity 359); arena stage formed by sliding panels in place of the proscenium walls and with seats on the main stage area (capacity 461); and space stage with cyclorama extensions creating a continuous horizon with the acting area defined by lighting



(capacity 397). The nature of these uses governs the planning of the seat tiers in a semi-circular form. Six tiers are provided on the ground floor and three tiers in the balcony. The rear seats are enclosed as boxes and a tiered pit area provides a maximum of seven rows of seats parallel with the front of the main stage. A gallery is designed within the roof, allowing the projection of lighting on to the stages from any angle. The pit area and the main stage are fully trapped. The property store in the basement beneath the stage area is totally enclosed and is approached via external stairs.

The external finishes generally are facing brickwork, rendered panels and hardwood cladding. The lower portion of the walls to the playhouse will be covered with mosaic or murals expressing theatrical themes.

Construction began in July, 1955. Consulting engineers: E. A. Pearce and Partners. Quantity surveyors: Branson and Chester.

THEATRE: MIDDLESBROUGH

Elder and De Pierro

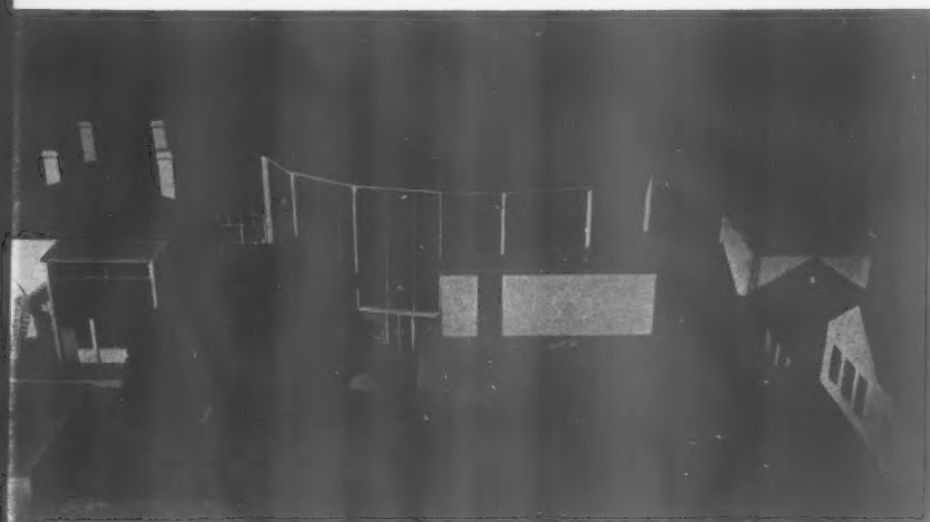
For the Middlesbrough Little Theatre, which was founded in 1930, but has been existing since then in a converted church hall. The site of the new building is in the well-wooded grounds of a large house in The Avenue, which serves as the theatre's headquarters. It has been designed for the production of the society's own plays as well as performances by professional companies (including Arts Council and Shakespearean productions) and intimate opera and ballet, and to serve on occasion for musical recitals, lectures and the showing of films not available at the commercial cinemas.

Requirements included as large a stage as possible and an auditorium seating 500, with circle. The entrance foyer and bar are under the circle. The entrance is reached from a drive-in forecourt, with car parks on one side. The box office is in the entrance lobby. The bar, on the side opposite the foyer, overlooks The Avenue through a glazed wall 50 ft. long and 12 ft. high, designed to dominate the exterior especially when lighted from within at night. The auditorium has a sloping floor and the circle is stepped. The dressing rooms, on three levels, are fitted in behind the splayed walls of the auditorium. The stage is equipped with travelling trolleys for fixed sets, thereby avoiding the need for a costly fly-tower. A basement

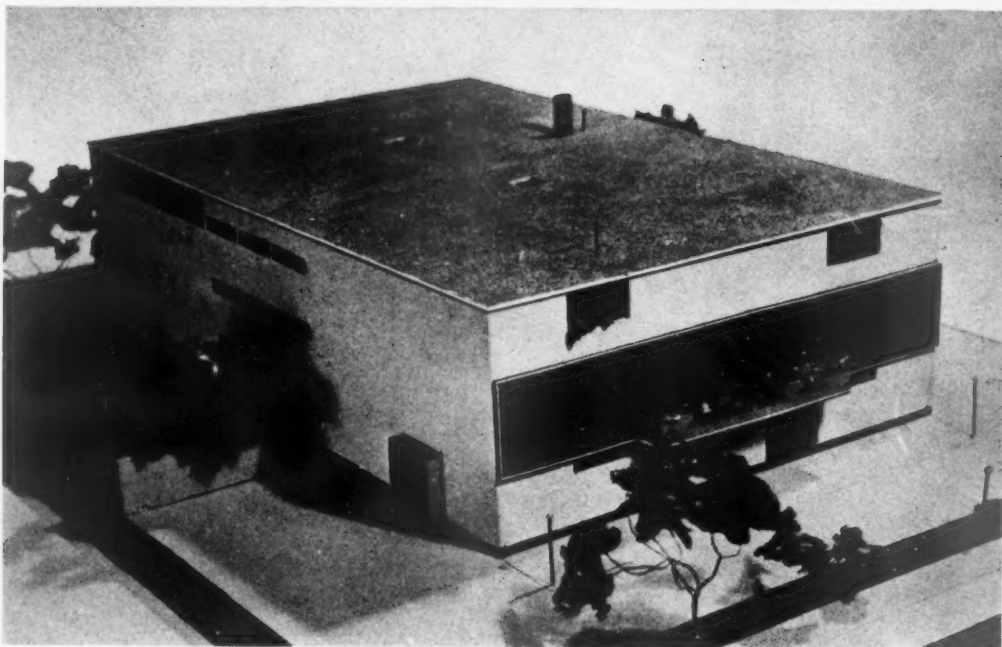
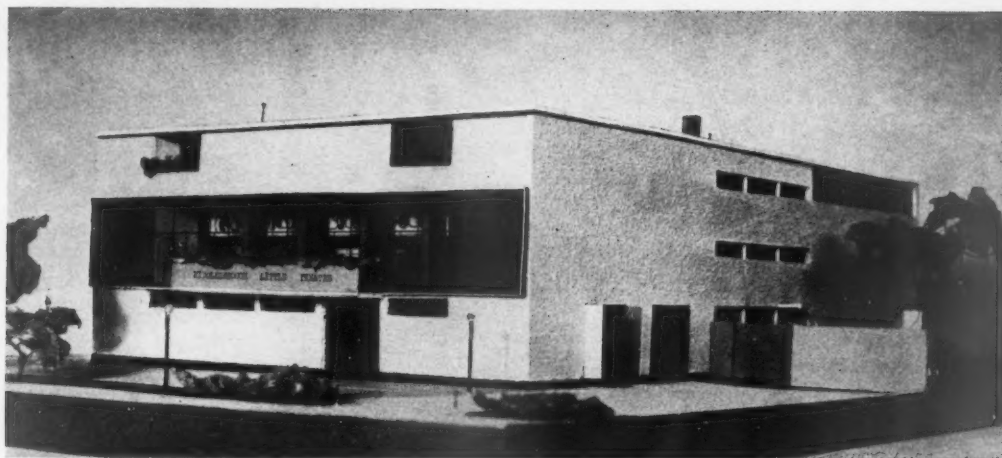
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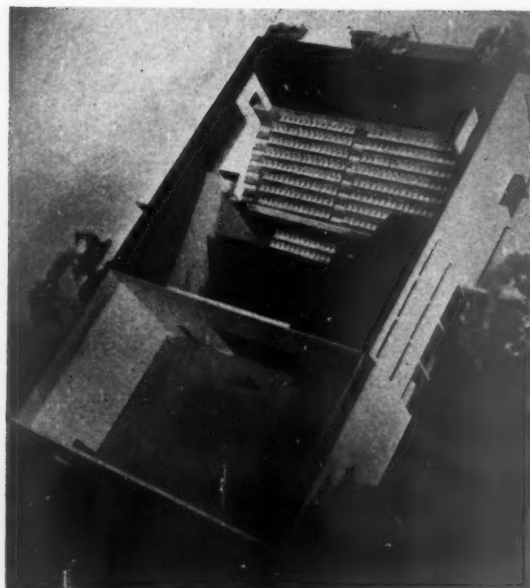
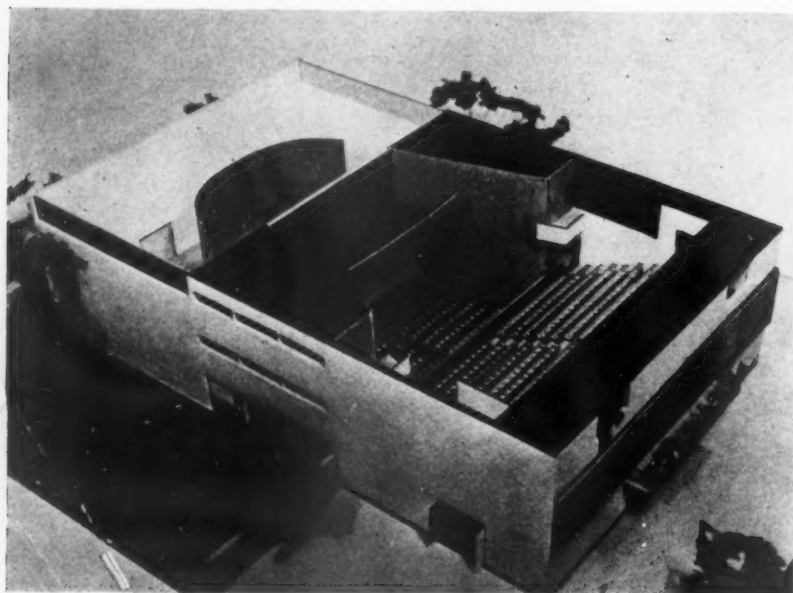
The Questors Theatre, Ealing, showing the oval-shaped auditorium building, linked to the existing mansion and surrounded by subsidiary buildings.



1. PUBLIC BUILDINGS



The Little Theatre, Middlesbrough. Right, the exterior from two directions. The long window lights the bar, which shares with the foyer the space beneath the circle. Below, the model with roof removed to show the interior. Three levels of dressing-rooms are fitted in behind the splayed walls of the auditorium.



Galtony

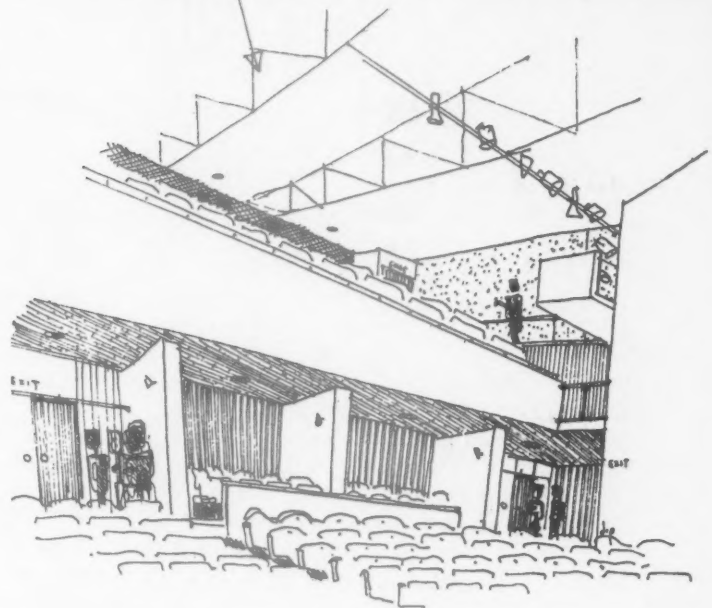
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continued from page 18]

beneath provides access to the orchestra pit and stage-floor traps as well as communication with either side of the stage and dressing rooms. The open roof of the auditorium consists of a series of triangulated tubular members, beneath which a timber acoustical canopy, containing lighting, projects from the proscenium opening.

Construction is of load-bearing brickwork on concrete foundations. Floors are concrete, mainly precast slabs. Stairways are of precast slabs set into the brick walls. The roof is also of precast slabs, with ribs, and with an outer skin of in-situ concrete on metal lath. Roof trusses



are of tubular steel, welded. Windows, doors and railings are of wood.

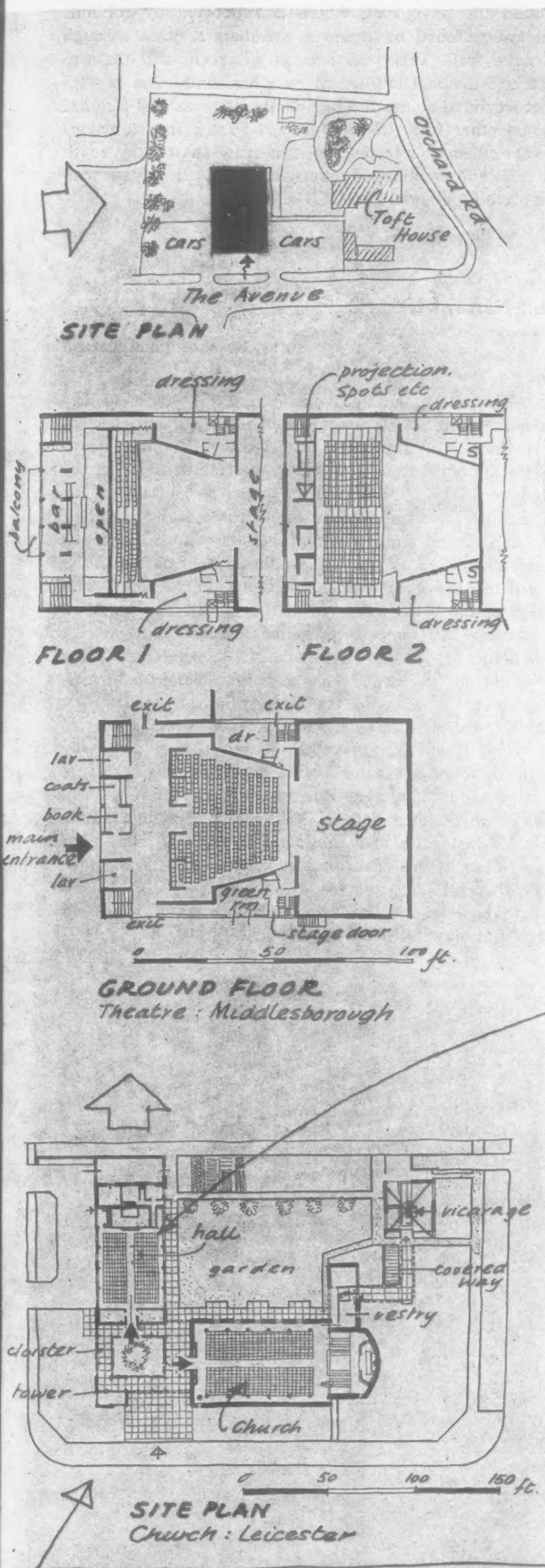
Work began in November, 1955, and is expected to be complete before the end of this year.

CHURCH: LEICESTER

Basil Spence and Partners

On the Monsell estate, one of the new housing areas of Leicester. The site is rectangular and flat. It is intended to start with the hall, which will be used as a hall-church, and the vicarage. The tower, the church proper and the connecting canopy, which forms the courtyard, will be added later.

The materials are brick with concrete frames, and with panel infill of various materials in parts of the buildings. The church is



GROUND FLOOR
Theatre: Middlesbrough

SITE PLAN
Church: Leicester

1. PUBLIC BUILDINGS

constructed round the nave roof, which is supported by columns which in turn are stiffened by concrete members secured through the U-shaped nave wall. This wall acts as a screen, and the gap between its top and the roof is filled in by a horizontal line of windows. The sanctuary is of stone, and behind the altar will be a mural painting, or some other form of decoration, lit from the clerestory directly above the chancel arch, and by a narrow slit on the south side. The font is lit and emphasized externally by a tall narrow window, a suitable place for stained glass.

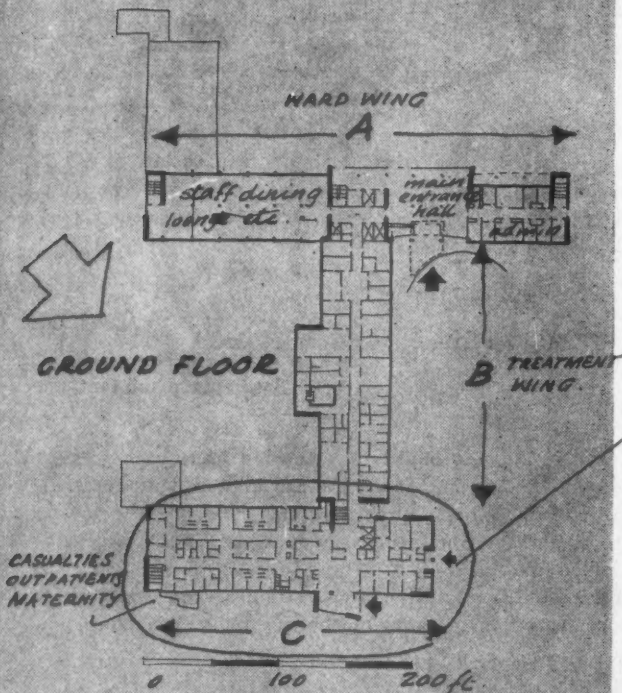
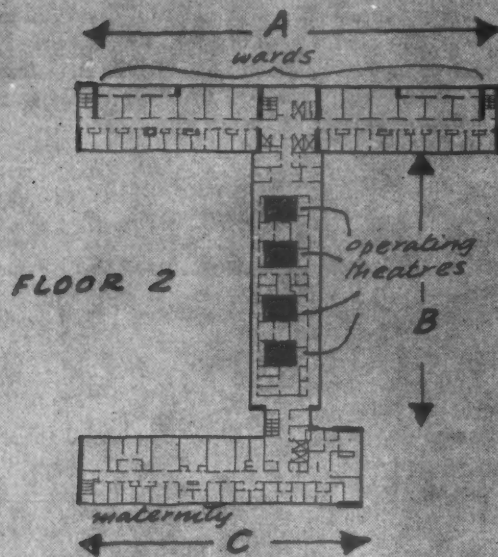
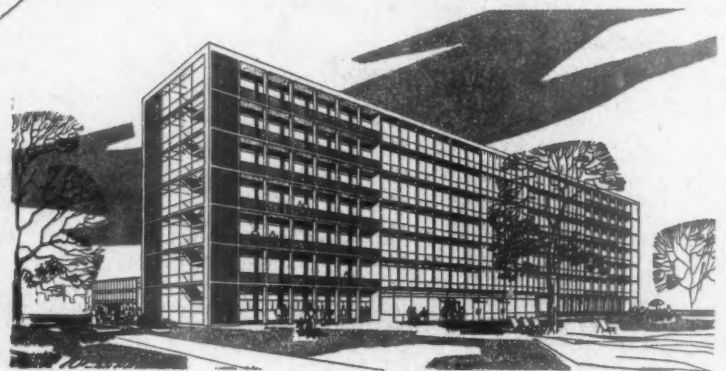
HOSPITAL: CRAWLEY

Yorke, Rosenberg and Mardall

For the South-West Metropolitan Regional Hospital Board, to provide a new general hospital for the town of Crawley and district. The site, where there is at present a small cottage hospital, has a fall of 10 ft. from the north-west to the south-east and has a number of well matured trees. The building will be completed in stages. The major need of the district at the present time is for casualty facilities, an out-patients' department and maternity beds. The block marked (C) on the plans includes all these and will be the first to be built. The second stage will include the treatment wing (B on the plans) and the southern half of the ward wing (A on the plans). The northern half of the ward wing will comprise the third and last stage.

The principal points of entry are separated. In the maternity wing there are three entrances: casualties, out-patients and maternity, planned on two levels. Visitors enter by the main entrance hall in the ward wing. Both in-patients and out-patients have direct access to the treatment wing, which comprises physical medicine, an X-ray department, central laboratories, and central sterilizing and operating theatres. The ward wing contains eleven ward units of 28 beds each, and one (pediatric) ward unit of 20 beds. The maternity wing contains two ward units for maternity and ante-natal cases of 20 beds each and two night casualty wards. The total accommodation of the hospital is therefore 370 beds.

A starting date has not yet been fixed. The hospital has been designed in collaboration with Richard Mellor.



2

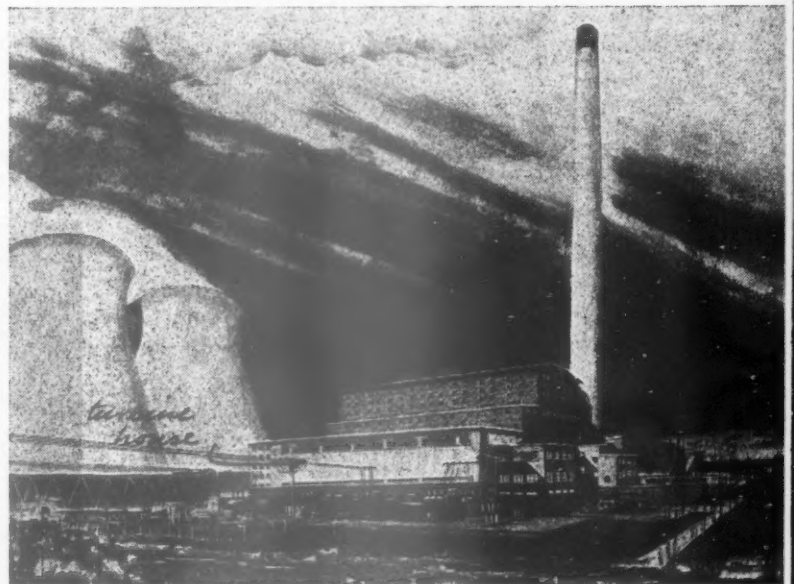
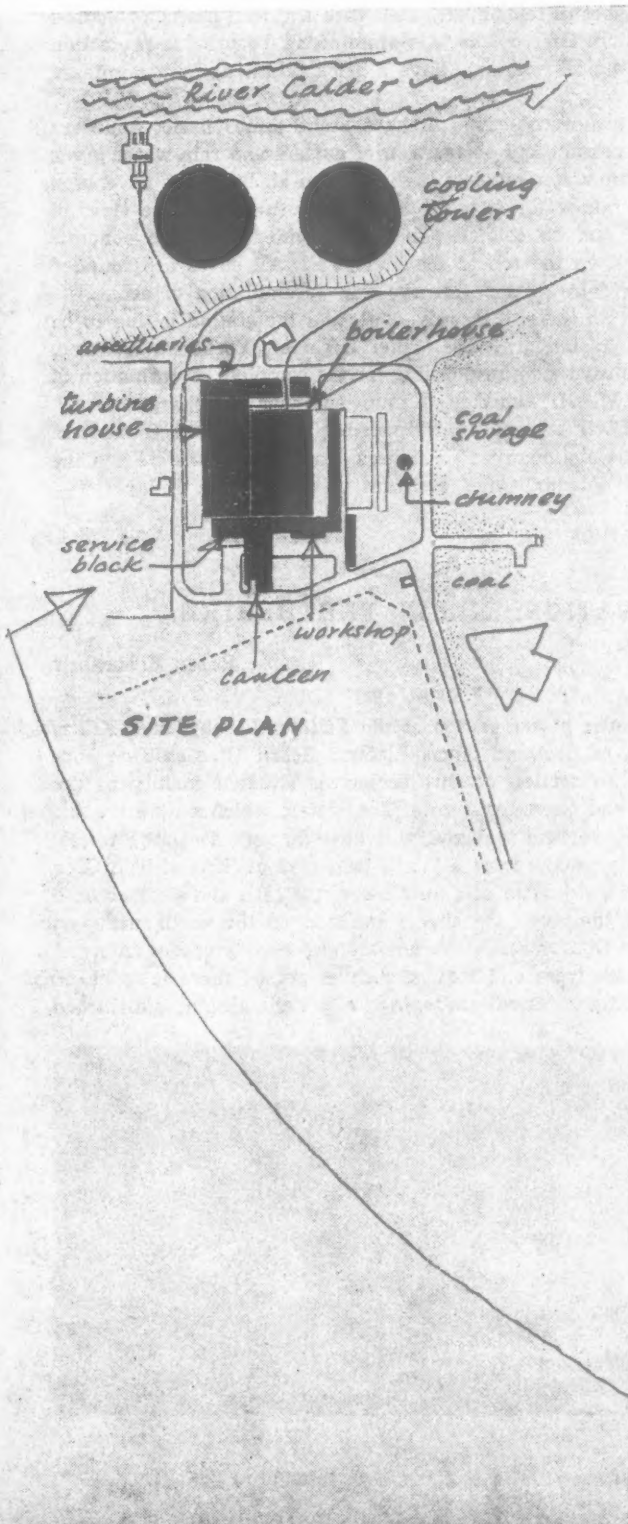
POWER STATIONS

POWER STATION: ELLAND, YORKS

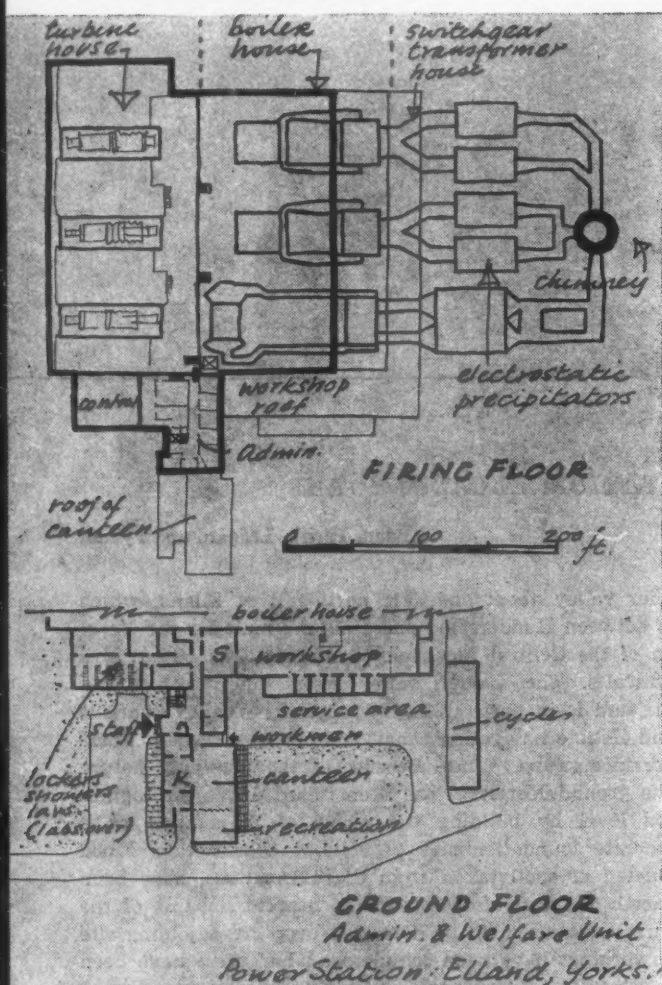
Kitson, Parish, Ledgard and Pyman

In the Calder valley about one mile north-east of Elland, which is equidistant between Huddersfield and Halifax; built for the Yorkshire Division of the Central Electricity Authority. The output will be 180 mega-watts. The Calder valley rises rapidly on either side to 400 ft., and is in parts thickly wooded. The valley contains the Calder and Hebble navigation canal, and one of the main Yorkshire to Lancashire railway lines. Because of the low-lying nature of the site, the ground-floor level has been raised above the highest recorded flood level by building the whole of the station on a reinforced concrete foundation slab of cellular construction. Flood banks, constructed of spoil taken from the excavations, have been built to the north and east of the station to prevent flooding of the site. Ash from the station is to be deposited over the adjoining site where gravel workings have been completed. When these have been filled up, the ash is to be transported to fill up nearby quarries.

Accommodation consists of the boiler-house (202 ft. 6 in. by 100 ft. by 128 ft. high) containing three boilers and associated equipment; the turbine house (229 ft. by 89 ft. by 61 ft. high) accommodating three turbines; the service and welfare block (a three-storey building comprising offices, laboratory, control room, locker room, showers, etc., with a single-storey wing containing kitchen and stores, canteen, workshop and associated stores); the two-storey switchgear and



2. POWER STATIONS



transformer building; a single-storey building incorporating ash plant, water treatment plant and stores, and the coaling gang centre; gate-house and cycle shed.

The main buildings have a steel frame and the single-storey buildings are largely load-bearing brick. The 400-ft. chimney and both cooling towers are reinforced concrete. It was required that as much of the station as was practicable should be clad in a lightweight material, fabricated largely off the site, with a thermal value equivalent to traditional methods of construction, for the turbine house and office block. The cladding that had to be insulated is a lightweight panel composed of a fluted profile 18-gauge aluminium alloy outer facing sheet and inner flat face of aluminium sheet sandwiching 1 in. of glass-wool insulation, and for those parts of the building not requiring to be insulated it is corrugated steel sheet with zinc coating and surface treated with asbestos felt impregnated with a special maroon-coloured bitumen solution. The roof deck is aluminium. To provide protection from bomb blast all buildings have a brick plinth up to a minimum of 13 ft.

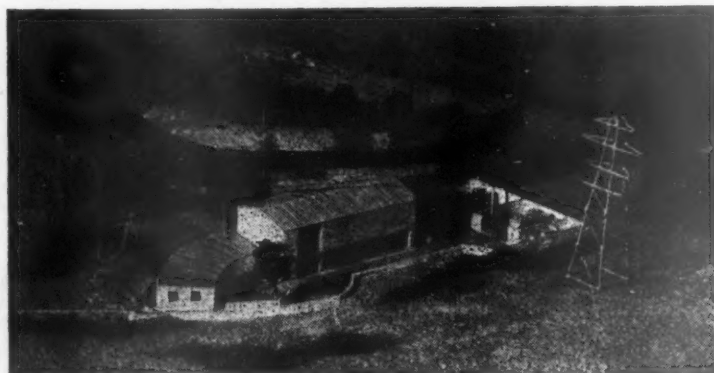
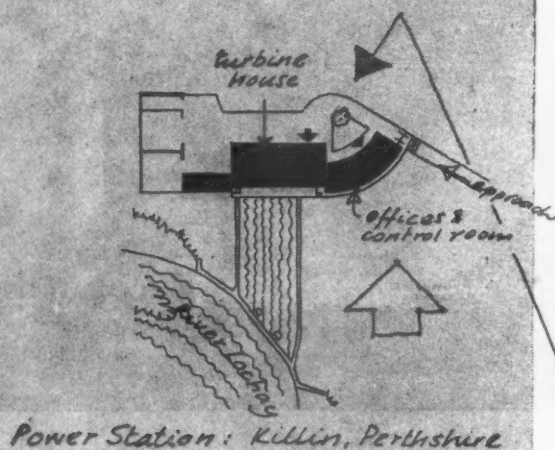
To overcome the problem of flying ash and atmospheric conditions causing deterioration and obstruction of gutters and rain-water pipes, gutters and rain-water pipes at high level on all buildings have been omitted, and rain-water is to be allowed to run down the sides of the buildings and be collected in a 4-ft. wide reinforced concrete gutter, situated on the top of the blast wall. All eaves are rounded so as to allow rain-water to remove any accumulation of ash.

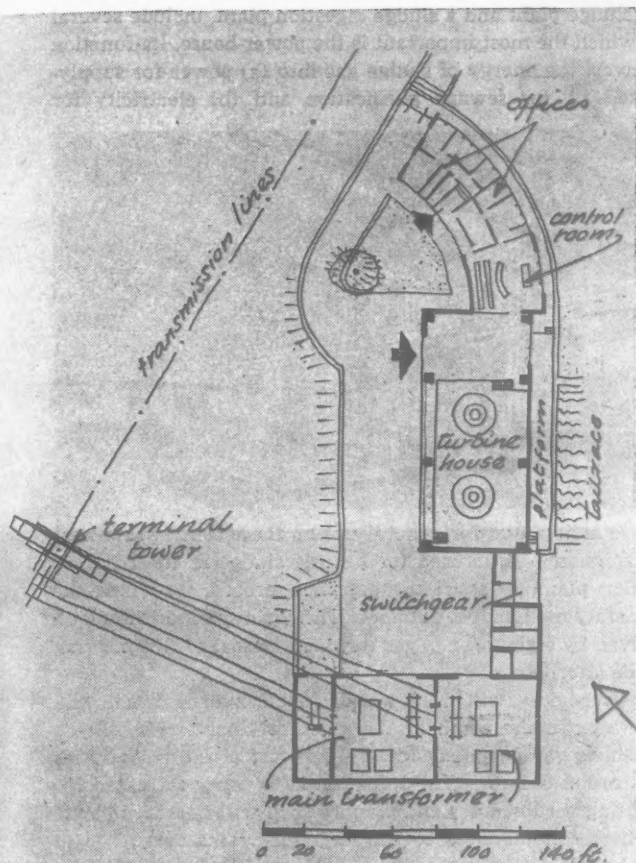
Work began on the site in July, 1954, and the station is due to be commissioned in January, 1958. Chief engineer, Yorkshire Division, Generation Construction, responsible for the complete co-ordination of the project: W. H. Dunkley. Group engineer in charge: A. J. Hodgkinson. Civil consultants responsible for site and foundation works: Brian Colquhoun and Partners. Partner responsible for the design: N. H. Fowler. Chief assistant in charge: M. Ryley.

POWER STATION: KILLIN, PERTHSHIRE

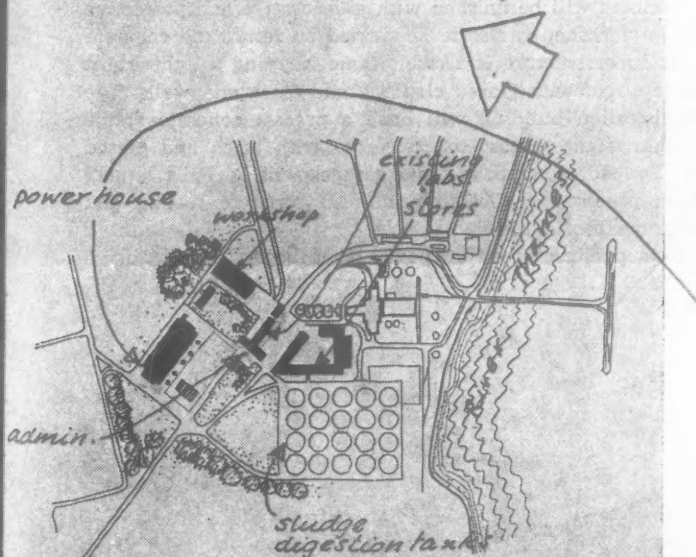
Robert H. Matthew

A hydro-electric power station at the Falls of Lochay, near Killin, for the North of Scotland Hydro-Electric Board (Breadalbane Project). The Killin section of this project is situated mainly in the Glen Lochay and Glen Lyon area. The water, which will drive the two 22,500 kW. vertical turbines, will flow through a $\frac{1}{4}$ -mile tunnel and a 1,670-ft. pipe-line from a 718-ft. long dam at Stronulch in Glen Lyon. Less than a quarter of a mile below the falls and situated on a sharp bend of the river, the site is enclosed on the north and west sides by steep wooded slopes. A landscaping plan proposes informal grouping of new trees and shrubs, such as gorse; there is to be no boundary fencing or formal gardening; where the ground is disturbed

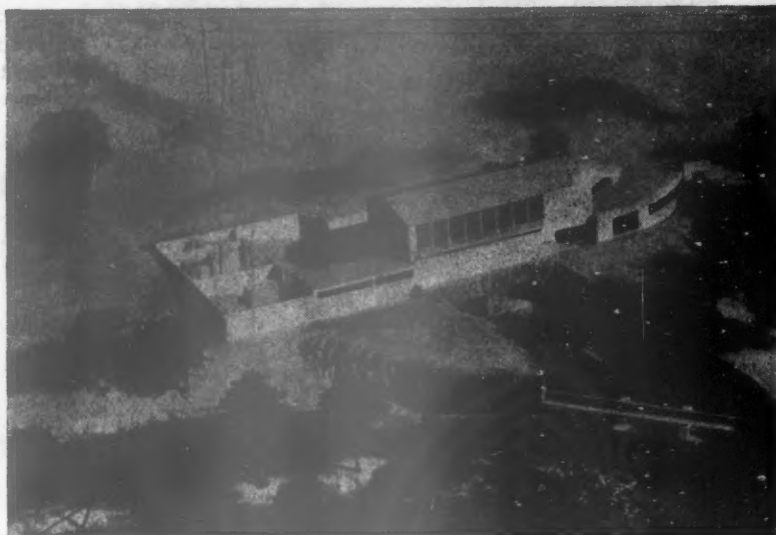




Power Station: Killin, Perthshire



SITE PLAN
Power House: Beckton



or made up to new levels it will be replaced by rough grassland.

The main factors affecting the design were: 1, electrical and mechanical considerations; 2, the height of the turbine-house, which was fixed by the level at which the crane must run and the head room required above it; 3, the importance of the view from the road above the site; 4, the need to avoid a sharp dividing line between the tail-race and the main building; 5, the decision to use stone as the main walling material, and 6, the position of the main terminal tower, which was fixed within close limits by electrical considerations. The turbine-house is given an even distribution of light by high-level windows on the south wall and low-level glazing on the north wall, which also gives a view of the generators from the entrance yard. A low block containing offices and control rooms is curved round to relate to the approach road, which has been planned parallel to the overhead lines running from terminal tower to the main transmission lines. Open transformer compounds, surrounded by high stone walls, are linked to the turbine-house by a covered block for switchgear.

The concrete of the tail-race is to be poured behind permanent shuttering of large dark grey stones laid on end, and the same stone will be carried over the draught-tube openings and round the south side of the office block. Roofs are of sheet copper laid on felt and boarding fixed to softwood rafters and steel roof trusses. External walls are in rough light stone from a quarry recently opened up in Glen Lyon; in the turbine-house there is an inner skin of concrete reinforced to act as bracing between the crane-rail supports. Windows are of aluminium alloy in teak surrounds; entrance doors to loading bay in teak.

Work will begin in March of this year. The station was designed in collaboration with the North of Scotland Hydro-Electric Board's consulting civil engineers, James Williamson and Partners, and consulting mechanical and electrical engineers, Merz and McLellan. Assistant architects: T. R. Spaven and R. Thurgarland. Quantity surveyors for superstructure: David Reid and Gibson.

POWER HOUSE: BECKTON

London County Council

Part of a scheme being carried out under the direction of the LCC Chief Engineer, J. Rawlinson, for extending the Northern Outfall Sewage Disposal works, which treats the sewage flow from the whole of the County of London north of the Thames. These extensions, consisting of detritus channels, primary sedimentation tanks, a diffused

2. POWER STATIONS

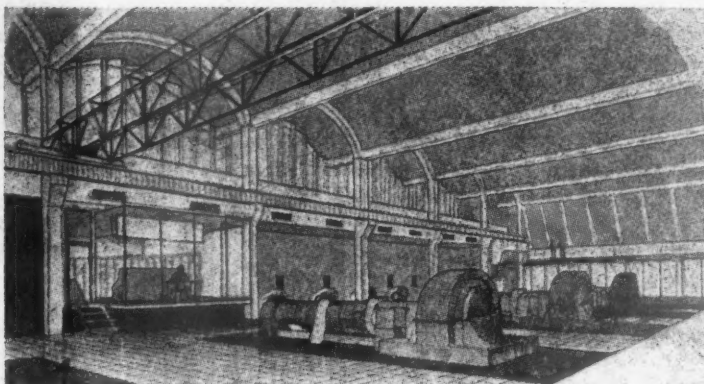
ventilation plant
blower intake duct
ventilator
extract duct

exhaust
stacks

Power House plan

0 100 ft.

air activated sludge plant and a sludge digestion plant, include several buildings, of which the most important is the power-house. Its function will be to convert the energy of sludge gas into (a) power for supplying compressed air for sewage purification and (b) electricity for



driving electric motors and for general use on the works; waste heat from this conversion will be used for heating sludge in the adjacent sludge digestion plant, to assist the digestion process by which the sludge gas (mainly methane) is obtained. The main units of the plant, which are driven by eight 900-h.p. gas turbines, consist of five blowing units and three alternators.

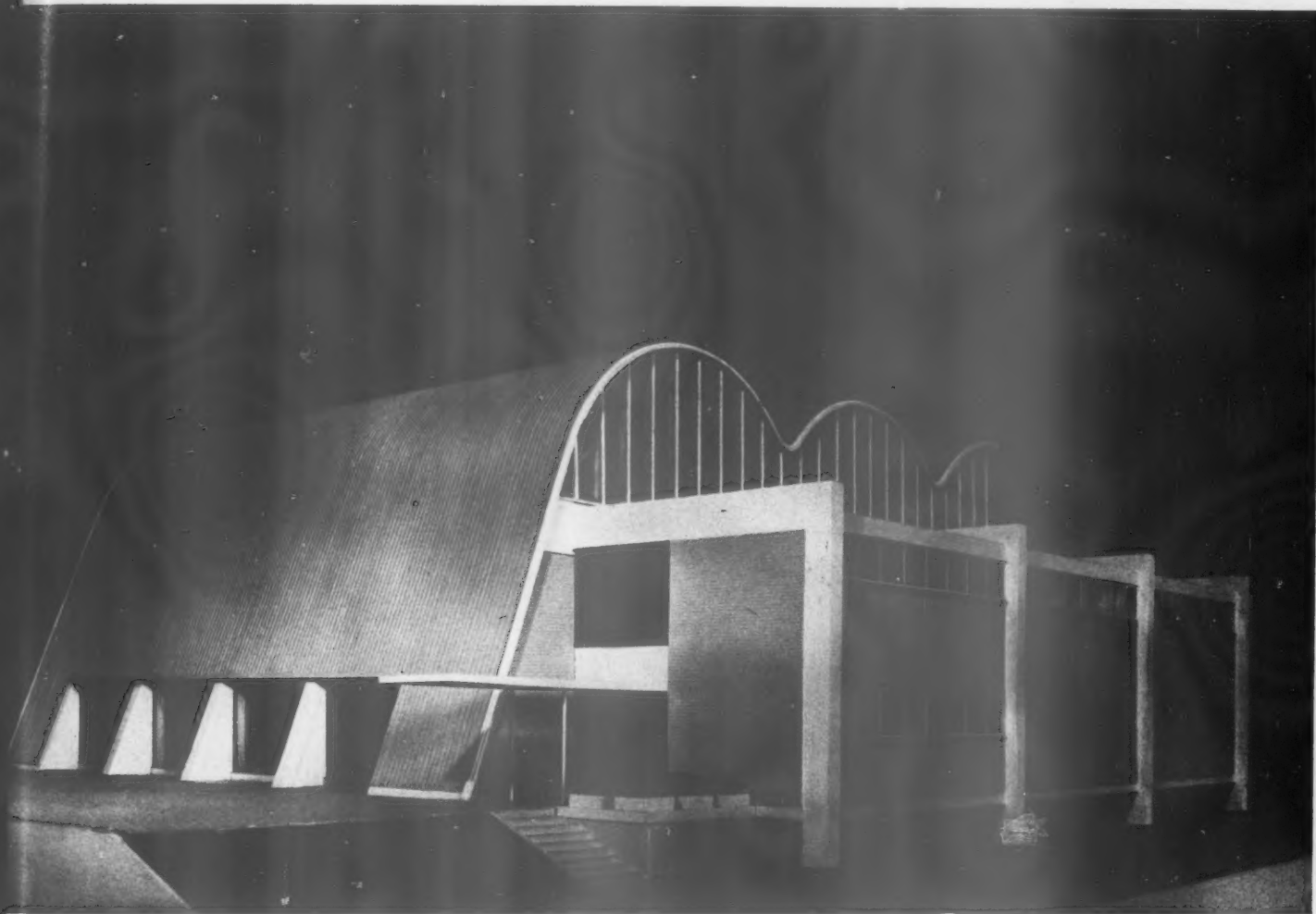
Near the power-house will be a workshop block to maintain and repair machinery. To the south of the existing laboratories will be stores with vehicle garages alongside. To the west of the laboratories is an administration building. The intention is to carry out extensive planting, choosing shrubs, trees and plants which will flourish in spite of an atmosphere contaminated by the large gas-works nearby.

The power-house contains a turbine hall, an air filtration plant and distribution duct, and gas compression, main control and auxiliary rooms. Machinery is located at two principal levels: the basement and the main floor, the latter being the level of the adjacent roads giving direct vehicular access to the turbines while a lorry ramp leads into the basement. Staff messing and lavatories are provided. It is expected that many visitors will come to study the function of the power-house and an observation gallery is therefore also provided.

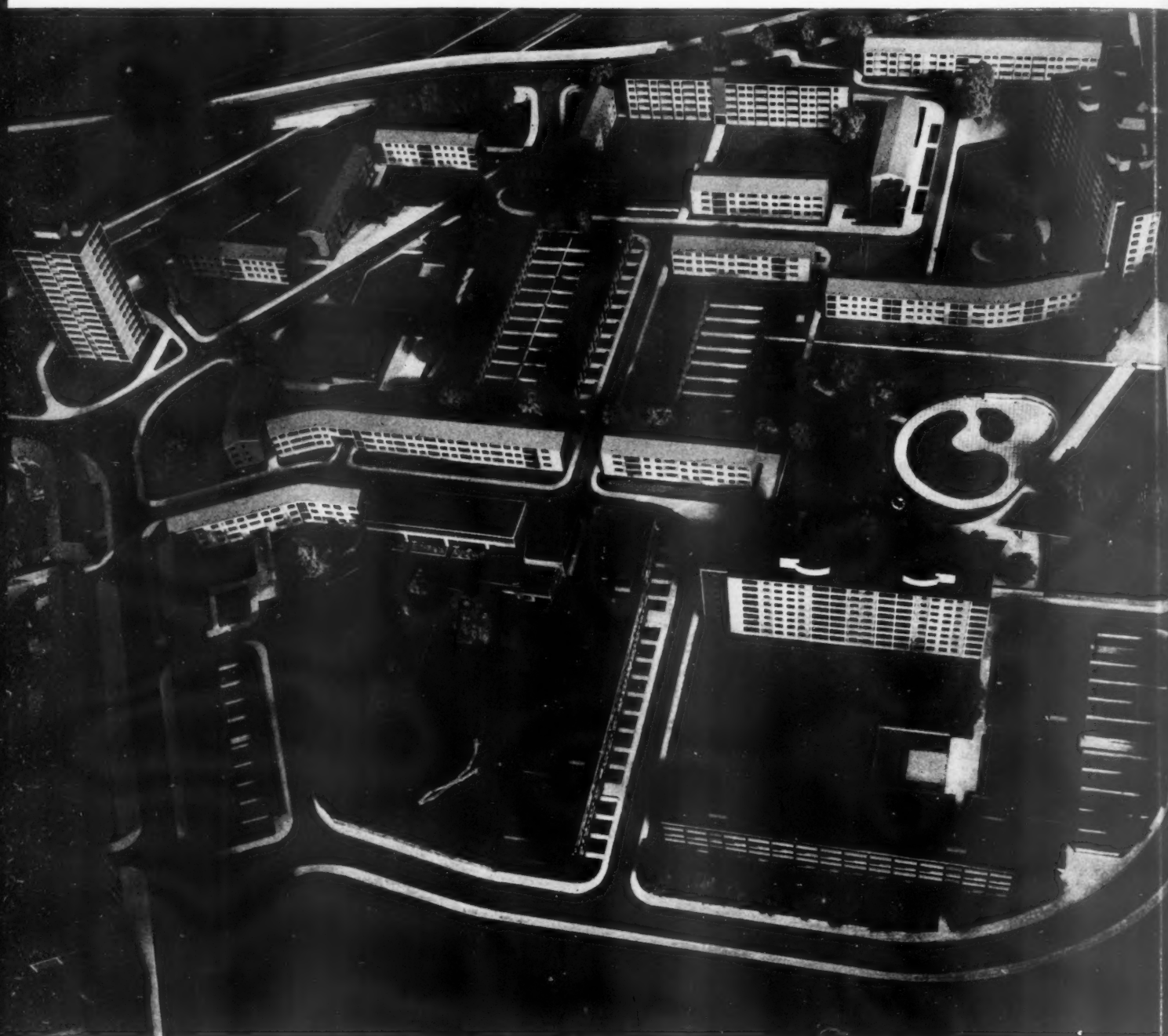
The superstructure of the power-house, which is composed almost entirely of reinforced concrete, is built upon a heavy reinforced concrete substructure carried in turn on piles cast on the site. As much as is practicable of the superstructure is to be site precast and even the shell concrete barrel vaults are to be precast in sections, hoisted into position and post-tensioned in situ. The exposed precast structural members will be finished with a decorative and protective rendering. The workshop is also to be carried on reinforced concrete piles, and the superstructure is a steel frame carrying a lightweight precast concrete roof with glazed cladding and brick end walls. The future administration building will have a precast concrete frame carrying a lightweight precast concrete roof with brick and glazed panel walls. The stores compound and garages will be built largely of brick with precast, prestressed reinforced concrete roofing and aluminium-framed roof lights.

Work on the superstructure of the power-house began last month.

Right, the Northern Outfall sewage disposal works, Beckton, showing arrangement of new buildings. The power house is on the right. Below, a detail of the power house.



3 HOUSING



St. Anne's neighbourhood, Stepney, East London. Salmon Lane, the shopping street, runs from the bottom of the picture towards the 15-storey point block.



- CDA boundary
- Public Open Space
- Rivers, Docks, Canals

Neighbourhood diagram

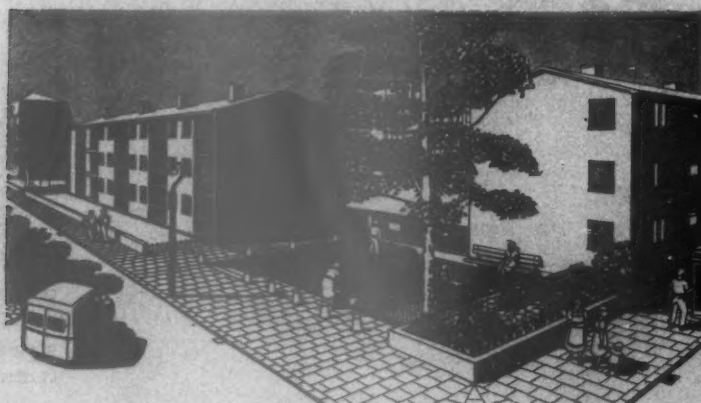
NEIGHBOURHOOD: STEPNEY

London County Council

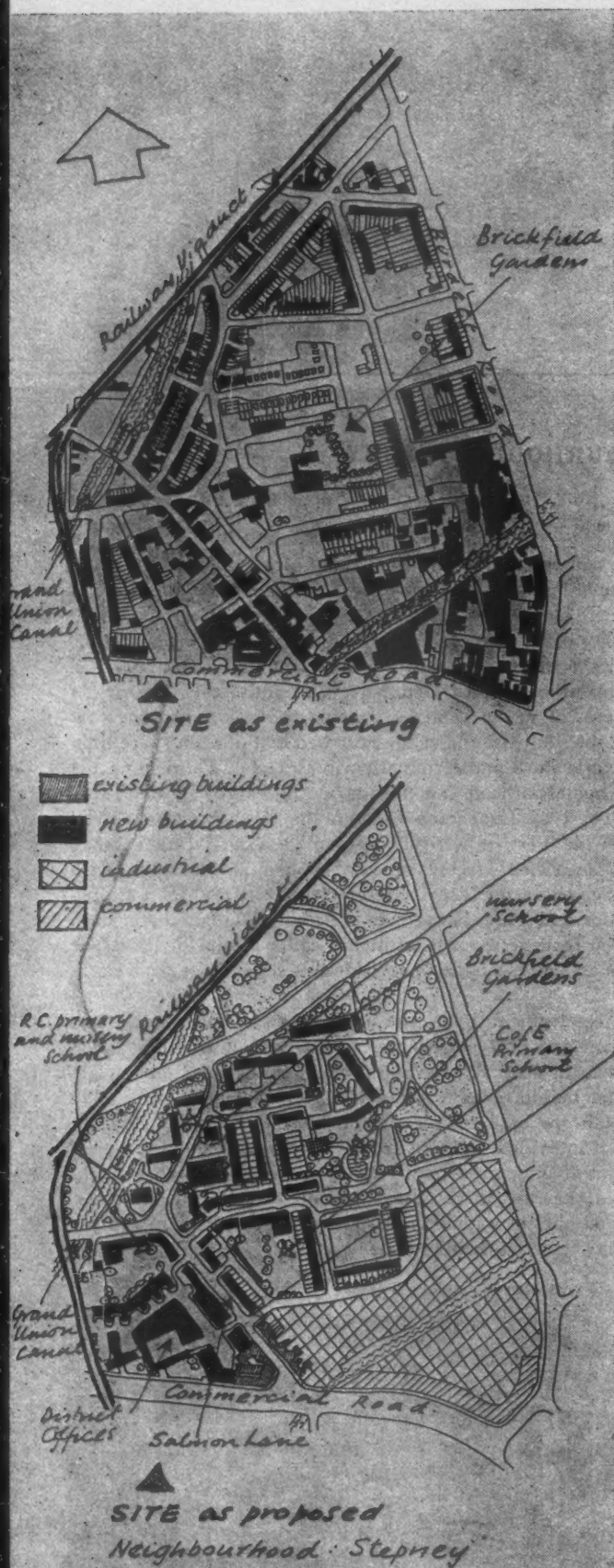
Part of the comprehensive reconstruction of the war damaged areas in Stepney and Poplar which have been replanned by the London County Council as a series of twelve neighbourhoods varying from 2,200 to 10,700 people, each as far as possible with its own schools, local shopping centres, open spaces and community buildings. St. Anne's neighbourhood, illustrated here, will ultimately occupy an area of 42 acres of which 17 acres is being redeveloped in the first stage. It is at the southern end of the proposed belt of open space linking with Victoria Park and terminating in Brickfield Gardens in the centre of the neighbourhood. It is bounded on the east by Burdett Road, on the south-east by Limehouse Cut, on the south by Commercial Road, and on the west by the railway and the Grand Union Canal. It originally consisted largely of low residential buildings, with almost a village character. They were erected about 1870 for working-class occupation and those that remain are mostly obsolete by modern standards. The road network is irrational and wasteful of land. The terrain is almost flat, although there is a very slight slope from north to south.

The new development takes the form of flats, maisonettes and houses at a density of 136 persons per acre, providing accommodation for 1,630 persons in the first stage and for 2,200 in the completed neighbourhood. The buildings have been kept low (but with some high blocks) to retain the basic scale and character of the area. The layout is composed of individual housing groups, each having its own special character. Two of these are squares formed round eight-storey blocks embodying, in one case, three-storey blocks of flats and in the other, four-storey maisonettes with private gardens. A third group consists of the shopping street of Salmon Lane, which is given emphasis at the

From the south-east, showing sunken terrace



3. HOUSING



One of the two eight-storey blocks

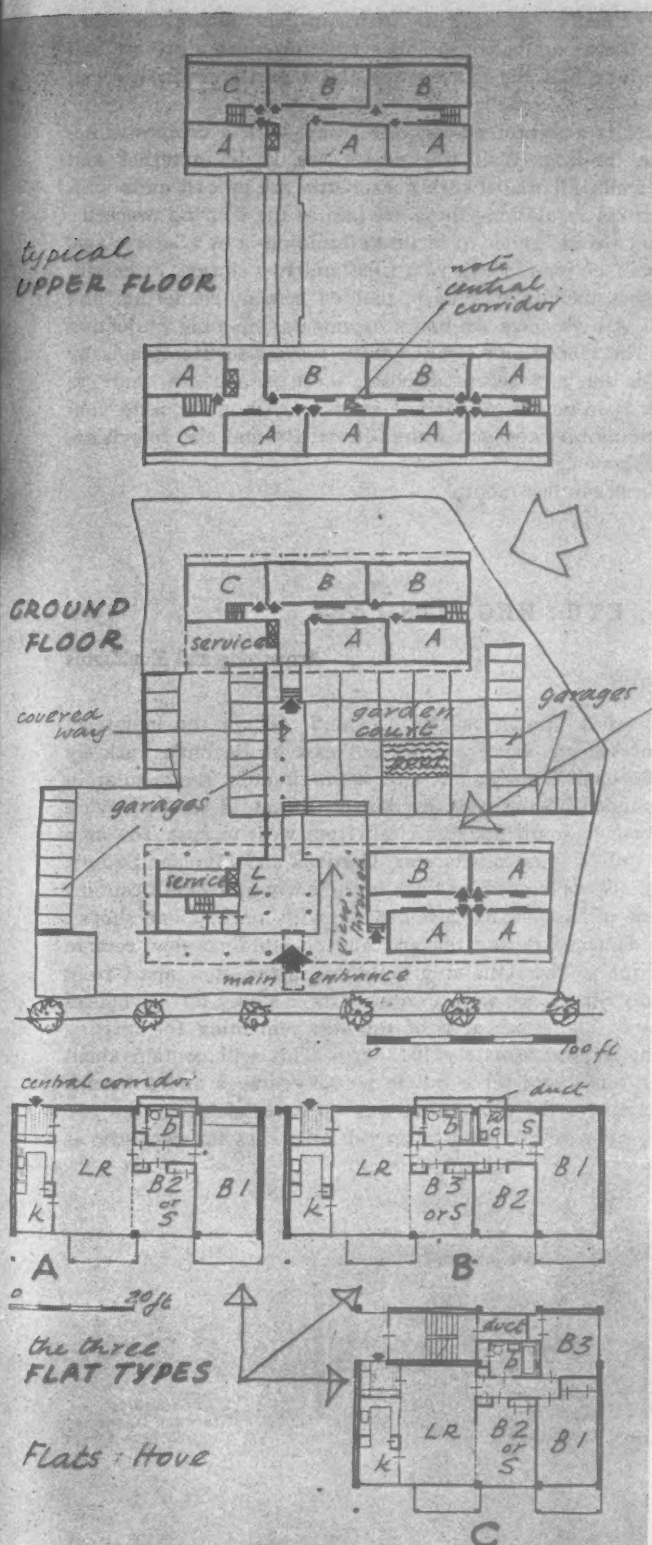
north-west end by a 15-storey point block and at the south-east end by the tower of St. Anne's Church, Limehouse, although the latter is situated outside the neighbourhood. A fourth group is formed as a square with a five-storey block as the dominant feature. In addition, there is a series of three-storey blocks along the banks of the Grand Union Canal. The individual groups are linked by short streets of two-storey cottages with private gardens of varying sizes, and three-storey blocks of flats. The established shopping centre in Salmon Lane is to be largely rebuilt in the first stage, providing shops along the Salmon Lane frontage with servicing facilities and garages at the rear. Above the shops are maisonettes. A site is provided in the ultimate layout for a new Methodist Church to replace the Edinburgh Castle Mission affected by the Council's proposals to extend King George's Fields Open Space. Three schools are included, as follows: St. Anne's C. of E. Primary School; Our Lady R.C. Primary and Nursery School; and Locksley Street Nursery School, of which the first forms part of the first stage. Land has been reserved for commerce in the south-west corner of the neighbourhood. Within this area district offices and a maintenance depot for the housing management department of the Council are sited and form part of the first stage. These are mainly single-storey buildings. The remainder is likely to be used to re-accommodate commercial undertakings displaced by the Council's operations elsewhere, but this land is not being developed at present. The existing road network has largely been replaced by a simpler layout, a change made possible by the need to renew existing services.

Work began in the spring of 1955.

FLATS: HOVE

Eric Lyons

A block of flats, sponsored by private enterprise, at Somerhill, Hove. There are three types of flat, as follows: 40 of type A (see plans), 23 of type B and 11 of type C, making 74 in all. The site is small, having an area of only 1.34 acres. There are 32 lock-up garages. It was required to keep the height of the building down to seven storeys. Corridor access was decided upon to produce a concentrated building with structural economy, and to establish better social feeling than is possible with gallery access or with staircase access with a small number of flats per landing. The objections to central corridor access on the score of ventilation is met by the use



of extract fans, and on the score of noise by the use of soft floor finishings.

Construction is reinforced concrete structural frame with two-way in-situ slabs 19 ft. by 19 ft. The flats will be centrally heated and supplied with hot water by an oil-fired boiler.



the main block, seen from the garden court

MAISONETTES: LIVERPOOL

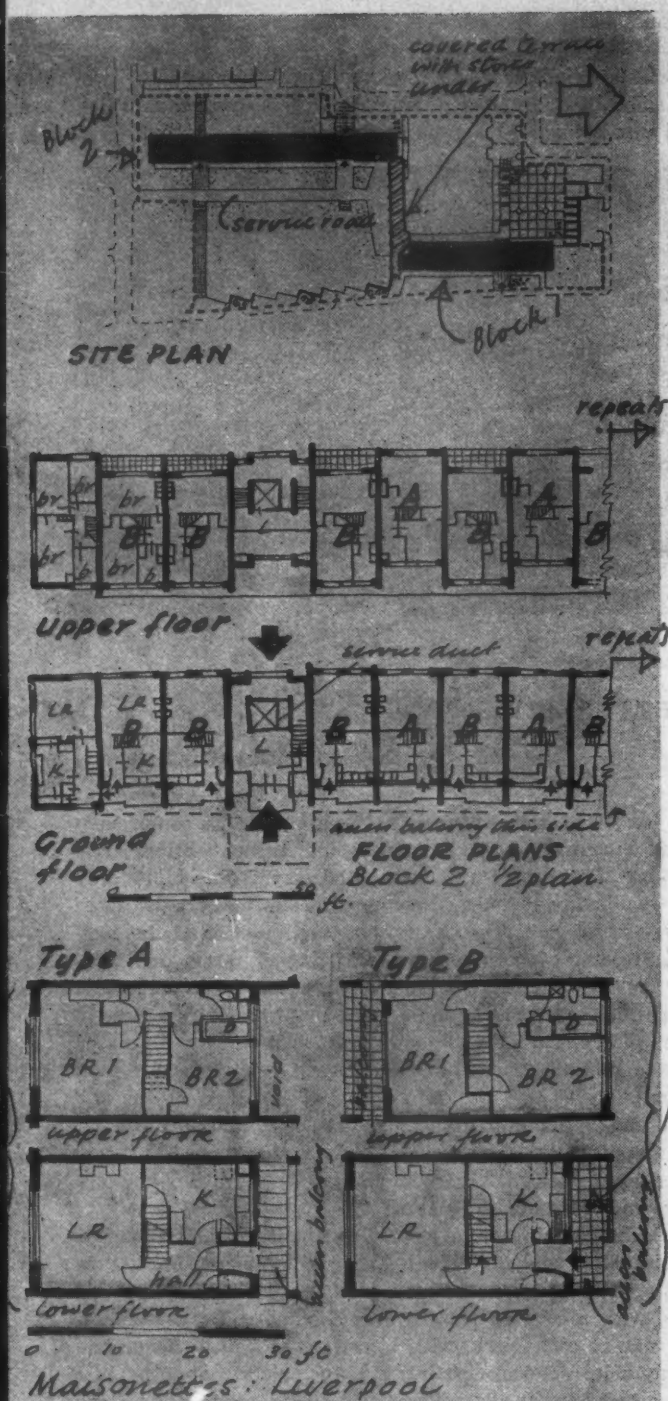
Ronald Bradbury (City Architect)

These two ten-storey blocks of maisonettes are part of a comprehensive layout in a central district known as the Anthony Street area, which contains four-bedroom houses, three-bedroom four-storey maisonettes, two-bedroom multi-storey maisonettes and one-bedroom two- and three-storey flats. The site forms a continuation of the completed Boyd Street project, a scheme consisting of three- and four-storey flats and a ten-storey maisonette block known as Cresswell Mount. The position of the blocks on the site is determined by a disused, now filled-in, quarry. The ground slopes at about 1 in 10 and necessitates the use of retaining walls and terracing. A central service road will serve both blocks and the store-rooms. The layout of the site includes a children's playground, a green area, tree and shrub planting and sheltered seats; the position and height above sea level afford interesting views over Liverpool and the River Mersey and also over Cheshire and to the Welsh coast beyond.

The two blocks contain a total of 105 two-bedroom and 15 three-bedroom maisonettes and are linked together by a low block containing 24 store-rooms (each 8 ft. by 4 ft., rented separately) and pump rooms, with a covered terrace over. Living accommodation is on the west side of each block, with kitchens and bathrooms on the access balcony side. Vertical circulation is in towers containing lifts and staircases and housing the lift machine rooms and water-storage tanks above roof level. The elevational treatment derives from the fire-escape regulations: alternate bedrooms require an escape balcony,



3. HOUSING



and this is obtained by pushing the bedroom floor out on the other side, i.e., over the access balcony. This system provides a private balcony to more than half the maisonettes and a partly covered access balcony.

The structure is a reinforced-concrete frame with a composite no-fines concrete infilling. Wall thicknesses are 12 in. external and 9 in. to party walls. Floors between maisonettes are precast units with fibre glass blanket insulation; these are laid as the pouring proceeds. Bedroom floors are in timber to facilitate building-in at a later stage. Maisonettes will be poured two at a time and two storeys in height. External finishes include spar dash, painted cement rendering, and painted metal. All windows are metal casements, top-hung projecting type, and can be glazed and cleaned from the inside. Heating is by open fires; for ash and refuse disposal, there is one ash chute to every twelve maisonettes. A vertical duct to each maisonette contains all plumbing services, gas, water, electricity and also television, radio and telephone cables.

Construction began last month.

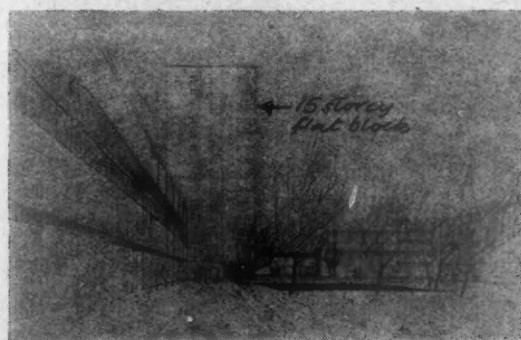
HOUSING, ETC.: REGENTS PARK

Armstrong and MacManus

Three new areas, known as 'E', 'F' and 'G', in the long-term redevelopment scheme being carried out east of Regent's Park by St. Pancras Borough Council. The site, approximately rectangular in shape and bounded on the west by Albany Street, is comparatively level from north to south but has a fall from west to east. The area contains two public squares, Clarence Gardens and Munster Square, and was originally developed by Nash in the early nineteenth century for the purpose of 'a working-class quarter with markets and shops'. It was much damaged during the war and no buildings now remain in Munster Square. The remaining buildings in the area, apart from those in Albany Street, are almost entirely three-storey terrace houses with basements. The gross area of the site remaining for housing redevelopment is approximately 10.8 acres. This will contain about 570 dwellings, ten shops, three public houses, garages and a branch library. The scope of the replanning was much restricted by the two large existing squares, the need to provide two sites for new schools

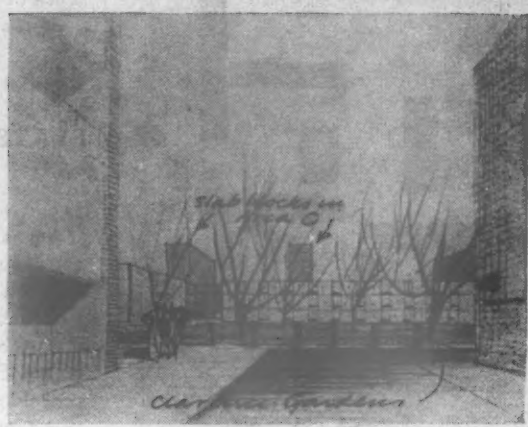


View south to Clarence Gardens from Robert Street.



Looking west towards the 15-storey block.

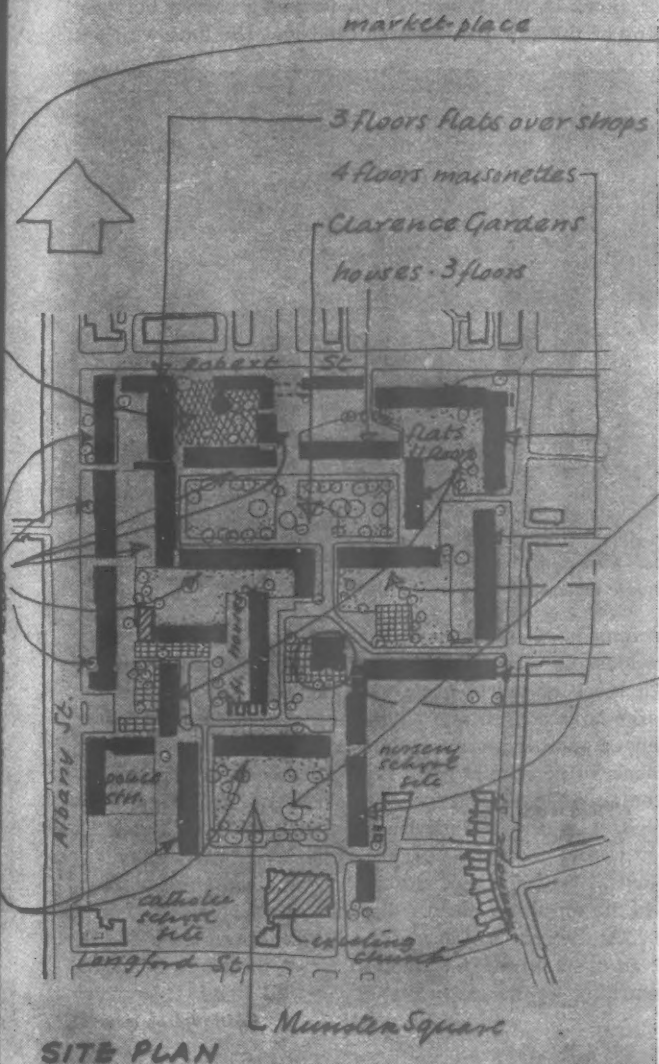
Munster Square from the south.



View north across Clarence Gardens.



The market place and branch library, looking east.



and a site for a new police station, to retain St. Bede's Mission Hall and provide for street widening and the preservation of the maximum number of existing trees.

The layout is informal and planned on precinctual principles in which the buildings, mainly of the terrace type, are so disposed as to form a series of varied and linked places and squares. Munster Square, redeveloped on three sides with domestic buildings (the fourth contains the existing St. Mary Magdalene Church and the new church school) is linked with Clarence Gardens through a more freely shaped place in which is sited a high point-block. Clarence Gardens is redeveloped with domestic buildings on four sides and from it a wide pedestrian way leads under a building into Robert Street. This building has been placed on the axis of Cumberland Market so as to close the vista and to complete the architectural composition formed by the two-slab blocks now nearing completion in area 'C'. Towards the west end of Robert Street a building with shops under it is returned into the site to form a small market-place containing the branch library, and placed so as to be associated with the row of shops already built on the opposite side of Robert Street. Another small square is formed at the south end of Albany Street, with the new police station, a new public house and the existing St. Bede's Mission Hall. Garages are provided under some of the blocks with direct access to the adjoining streets.

The whole area has no formal road system, being treated as a pedestrian precinct. Essential wheeled traffic will have permissive use over paved areas between the blocks, on a defined way of setts charted with posts and bollards, thus preserving pedestrian

extended block VIII
6 stories - 3 room middle flats

side of LCC School

Block IV - 3 1/4 room middle 6 stories

Block V - 3 1/4 room middle 6 stories

Block I - 16 stories 2 room flats

Block II - 6 stories 2 room flats

Block III - 6 stories 2 room flats

Block VI - 6 stories 3 1/4 room middle

Block VII - 3 1/4 room middle 4 stories

Block IX - 1 room flats

Block X - 2 room flats

shop

1 room flats

laundry collection

Ground Floor

1st, 2nd, 3rd Floors

Plans at Intersection Blocks IX & X

2 ROOM FLATS
Block X

1 ROOM FLATS
Block IX

sitting dining K

N. dressing sleeping b

17'6"

27'0"

11'3"

35'0"

acc. entry

cooker

Construction of the housing is expected to begin late this year.

Chamberlin, Powell and Bon

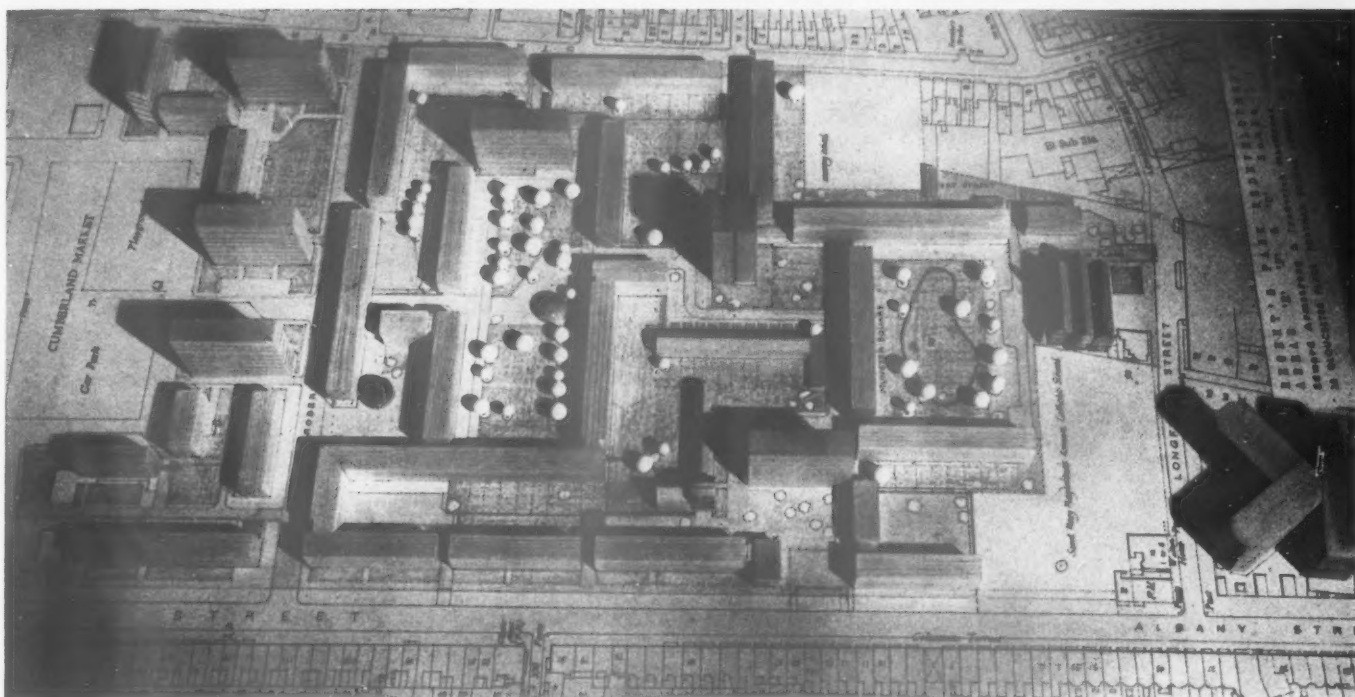
An addition to the Golden Lane housing scheme illustrated in the corresponding issue to this two years ago. Extension of the site to Goswell Road has increased the gross area by 1.95 acres. At the maximum permitted density of 200 persons to the acre, the population may therefore be increased by 390 to a total of 1,390. The revised layout aims at housing the 390 additional persons while maintaining the character and unity of the scheme. The new blocks are of six and four storeys, the four-storey block running north to south, and the six-storey blocks running east to west in the manner of the original layout. Block II, which would have formed a barrier between the two sections of the site, has been omitted and the flats which it



The scheme before extension

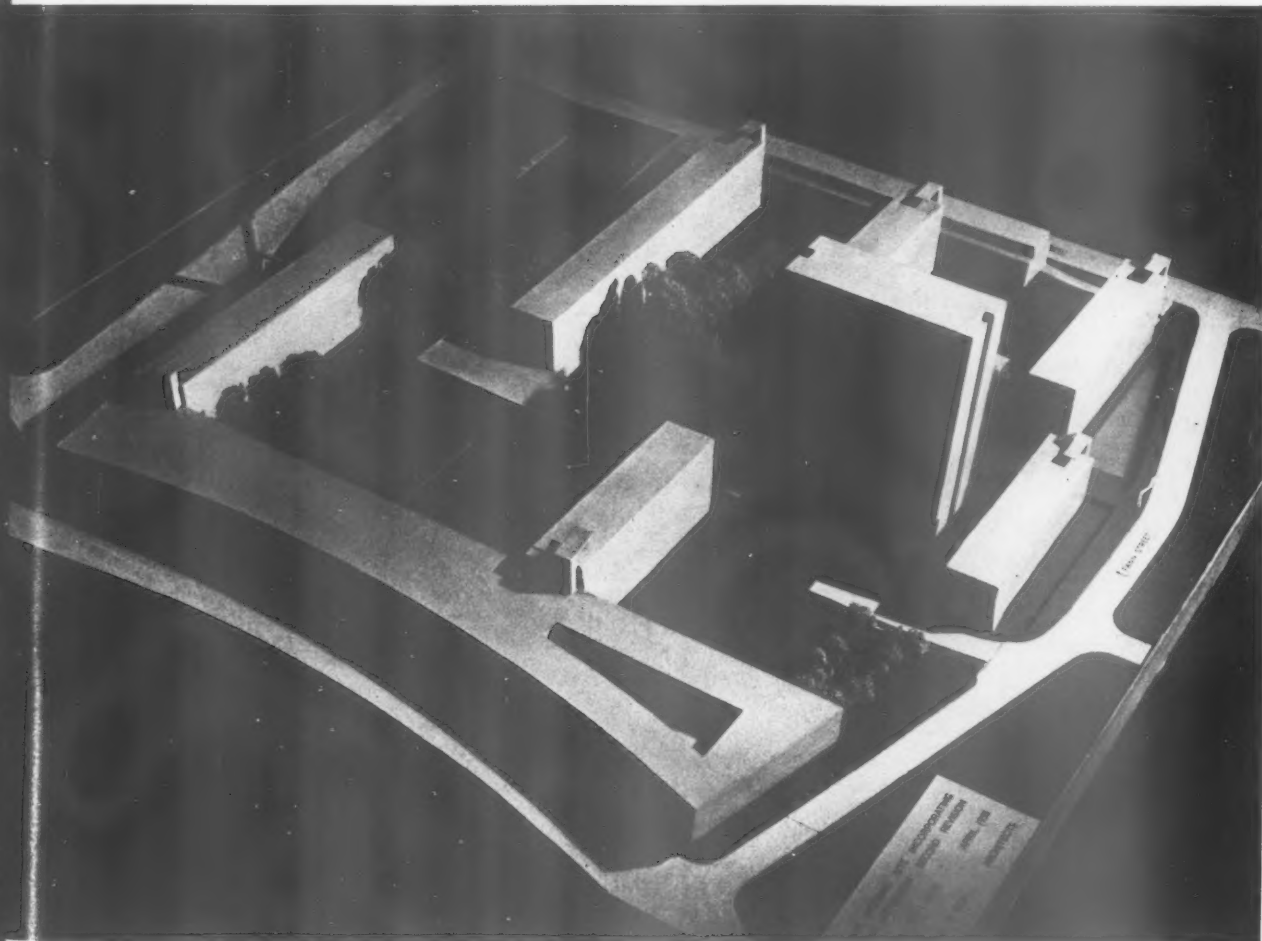
contained accommodated in the new blocks. In the original layout a degree of spaciousness was achieved by housing a large number of flats in a high block of fourteen storeys. The new extension is not sufficiently large to accommodate satisfactorily another high block, but it has allowed another storey of flats to be added to the existing high block. Block VIII in the original layout has been extended westwards and contains the same type of maisonettes as before. It is six storeys high, with access galleries on alternate floors. Block IX is also six storeys and contains one-room flats. Access is by a gallery at each floor level. Block X is four storeys high and contains two-room flats, limited to the top three storeys, disposed either side of a central access corridor. At the southern end of the block, this corridor divides either side of an open space. The ground floor of the block is unsuitable for flats, owing to the proximity of Goswell Road. It contains

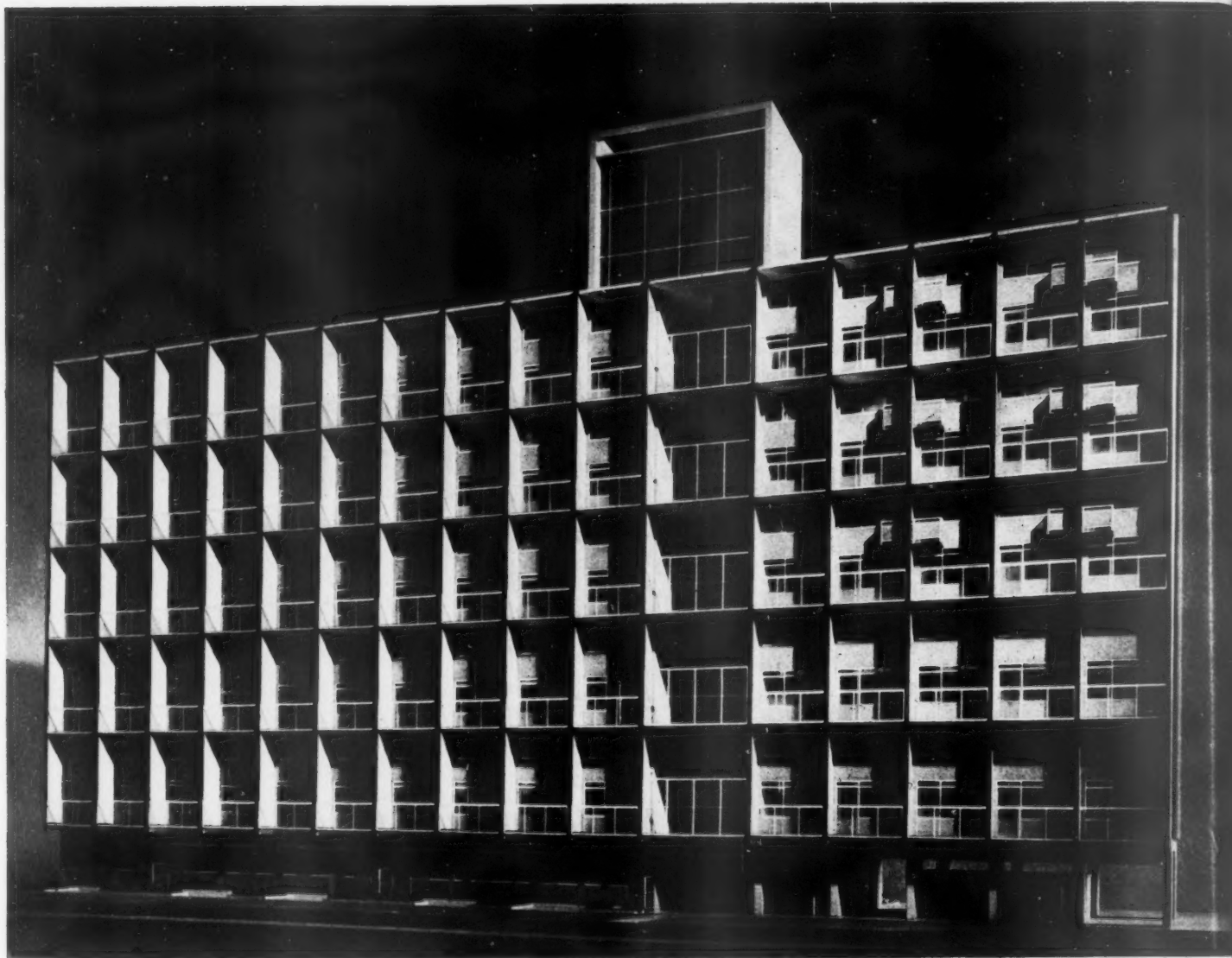
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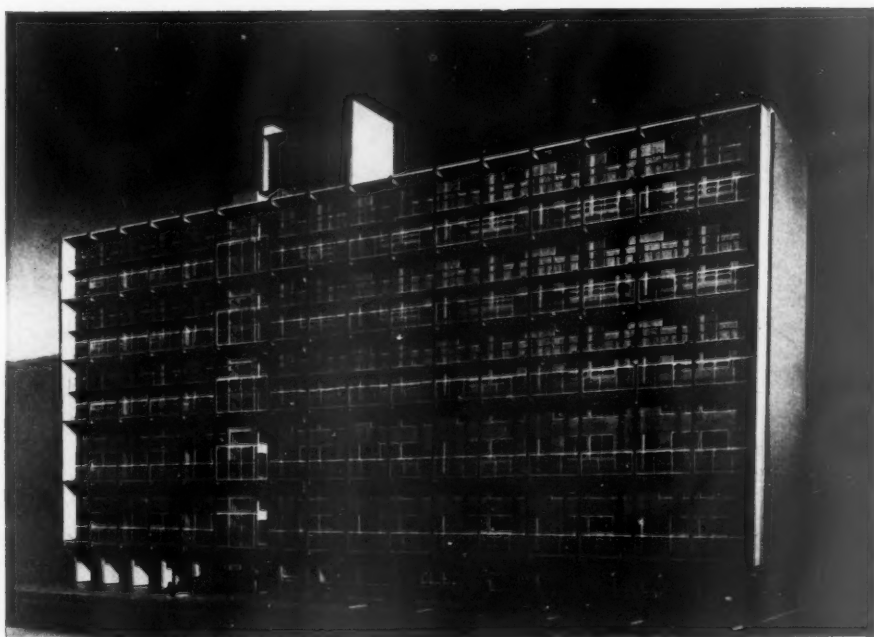
Above, the new section of the large housing area east of Regent's Park, showing the planning in the form of a sequence of connected squares.

Below, Golden Lane housing scheme in the City of London in its extended form. The divided block on the left of the picture is the new one, with shops on the ground floor, facing Goswell Road.

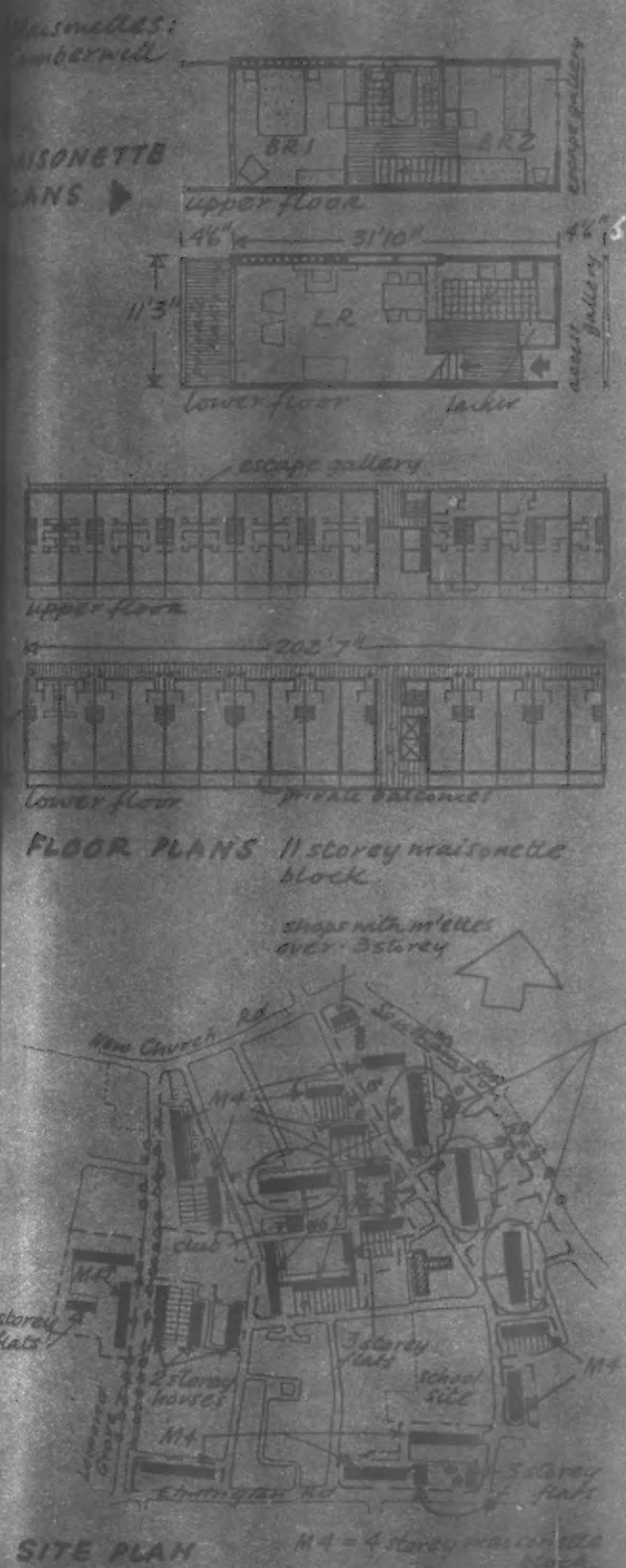




LCC housing at Picton Street, Camberwell: the eleven-storey maisonette block. Above, the living-room side showing two-storey balconies. Below, the entrance side. (See also the cover of this issue).



3. HOUSING



continued from page 84]

instead twenty shops of 17 ft. 6 in. frontage and a public house, all facing on to the road, and a space for a restaurant facing inwards towards Block I.

The western part of the site is served by an estate road connecting Fann Street to Baltic Street, and ramps down at either end from road to basement level. The reason for sinking the estate road is to avoid the bisection of the site at ground level, to maintain the principle of reserving the surface of the site for pedestrian use, and the convenient service at low level to shop basements, garages and refuse chambers. Sixty-three lock-up garages are provided at basement level beneath the court to the south of Block IX. Blocks VIII, IX and X, by their disposition, partly enclose two courts, one to the north and one to the south. These courts are open to the central part of the site around Block I, and have access to Goswell Road, via openings at ground level under Block X. The northern court is partially sunk and it is suggested that it should contain a bowling green. Immediately to the east of this proposed green is a low building, containing two badminton courts at low level, and a nursery room at ground level. To the north of the green is a raised terrace, and behind this an arcade of rooms which can be either open or enclosed to form shelters or club rooms for old people, children or persons using the games facilities. The northern part of the court contains the children's playground. The west end is for older children, and the east end, adjacent to the nursery room, is for young children.

The construction, a mixture of load-bearing brick and reinforced concrete, is as described with reference to the main part of the scheme. Construction will begin early this year. Quantity surveyors: Davis, Belfield and Everest. Consulting structural engineers: Ove Arup and Partners. Consulting heating engineer: H. J. Knox.

MAISONETTES: CAMBERWELL

London County Council

A mixed housing scheme at Picton Street, consisting of 682 dwellings, five shops, clubroom, workshops and play areas. The dwellings are grouped into four eleven-storey blocks of maisonettes, each containing 80 dwellings, and 18 four-storey blocks of maisonettes with private gardens. The site is flat and previously contained derelict and partly war-damaged two-storey, early Victorian terraces. A number of small existing streets will be closed as a result of the redevelopment. The acquisition of the site is being achieved piecemeal as a result of which the new development can only proceed in phases, following demolition. The scheme is an experimental one, designed to ascertain to what extent collaboration between the architects, engineers, surveyors and contractors, from the earliest stages, can contribute towards the introduction of new techniques and the reduction of building costs. It is the work of a team comprising architects, engineers, quantity surveyors and representatives of the Building Research Station and also of the contractors, who were nominated at the design stage. A tower-crane is being used for the construction of the eleven-storey buildings and many of the components have been prefabricated or designed in such a way as to make maximum use of this crane. These components have also been designed as far as possible to reduce the volume of wet processes, particularly plastering.

Construction of the eleven-storey blocks consists of in-situ concrete cross-walls (each alternate wall only being reinforced) with precast main floor units and prefabricated timber intermediate floors. External walls and internal partitions are of prefabricated timber-framed panels, with hardwood or plasterboard facings respectively. Construction of the four-storey blocks consists of in-situ mass concrete cross-walls, with in-situ main floors and prefabricated timber intermediate

3. HOUSING

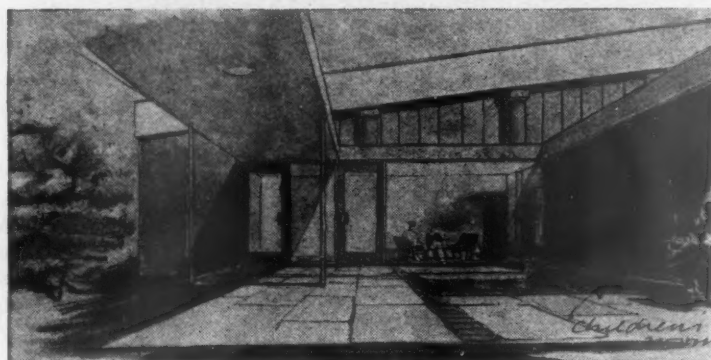
floors. External walls and partitions are similar to the eleven-storey blocks except that the cladding (being on sheer faces) is aluminium sheet.

Work started in January, 1955.

FLATS: HIGHGATE

Eric Lyons

For the Soviet Trade Delegation in the grounds of their offices at West Hill, Highgate. The new buildings are on the part of the site fronting to Millfield Lane. The accommodation consists of six flats with bed-sitting room, kitchen bay and shared bathroom; five flats with bed-sitting room, bath and kitchen; seventeen flats with living room, bedroom, bath and kitchen, and eight flats with living room, two bedrooms, bathroom and kitchen, making thirty-six flats in all.

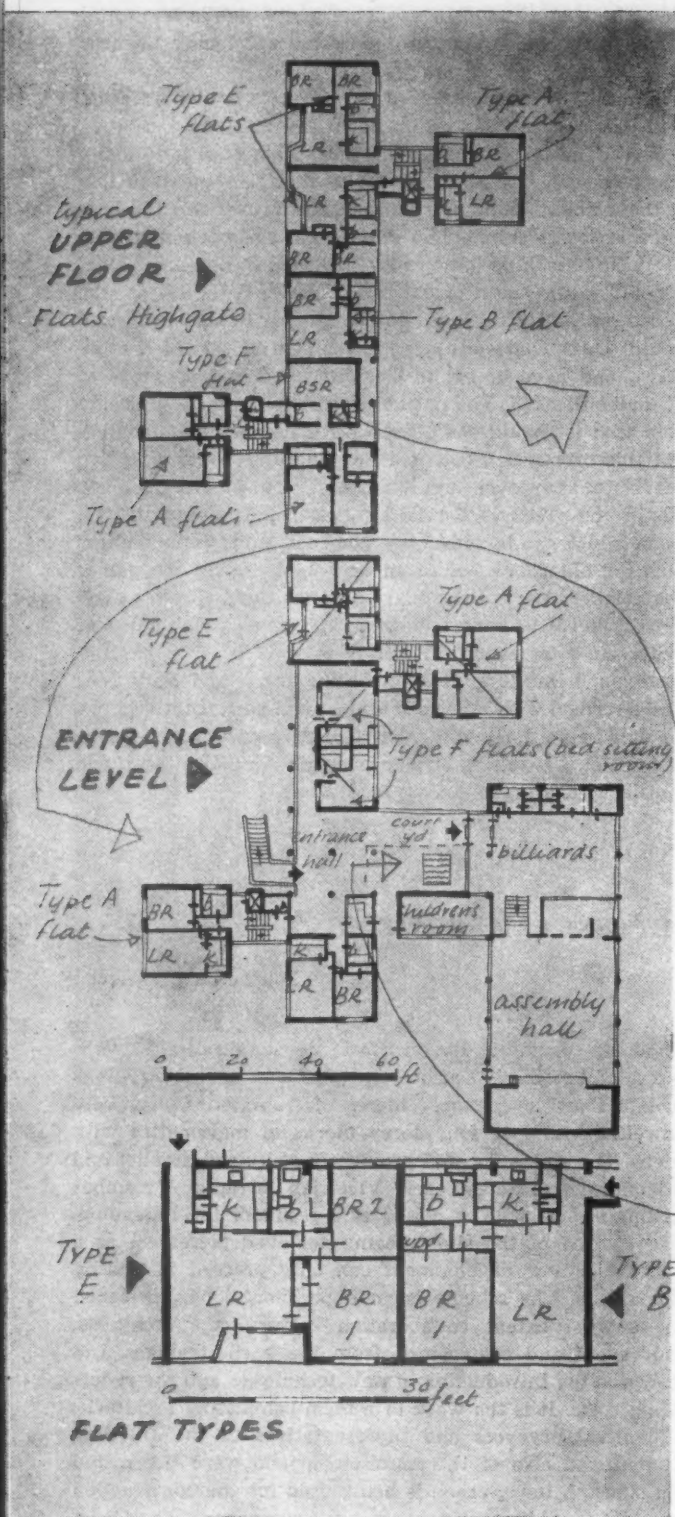


Top, from the south-west; bottom, inside the courtyard

In addition there is a recreation room with stage and projection box, and a games room, lavatories, children's playroom and playground.

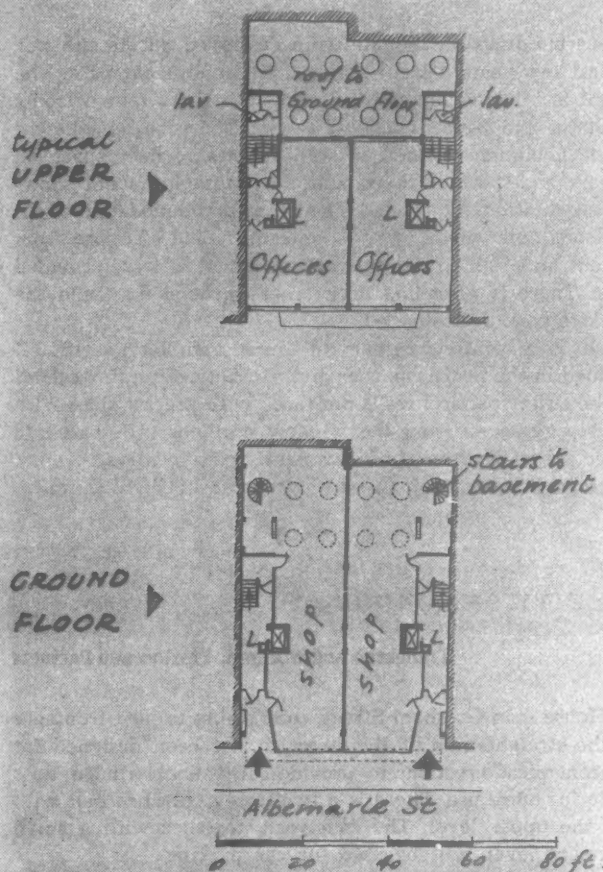
Construction consists of a reinforced concrete frame and floors, with external brick filling.

Work began last month.



4

OFFICE BUILDINGS

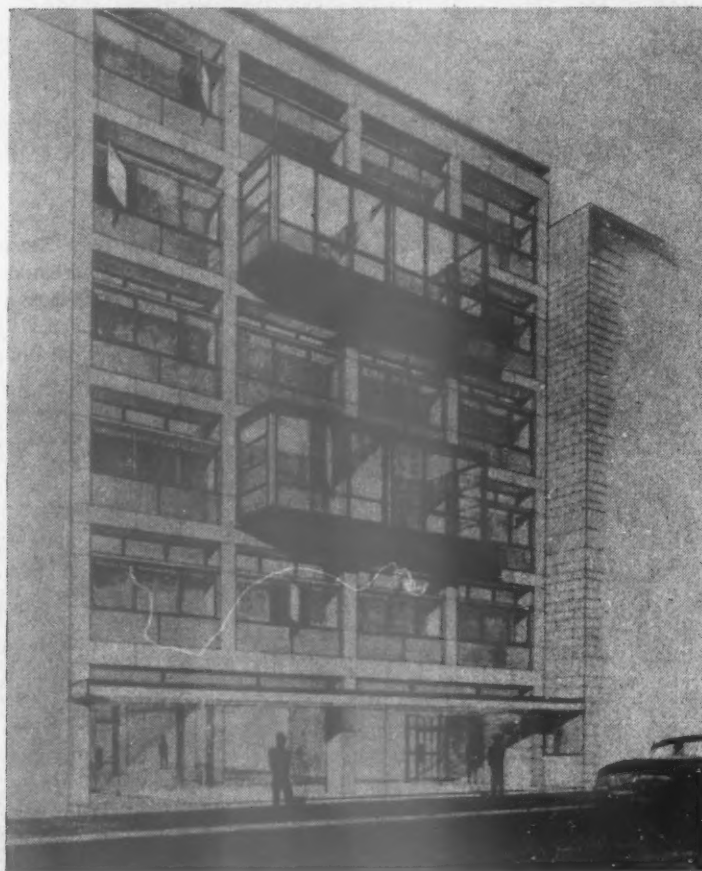


OFFICES AND SHOPS: ALBEMARLE STREET

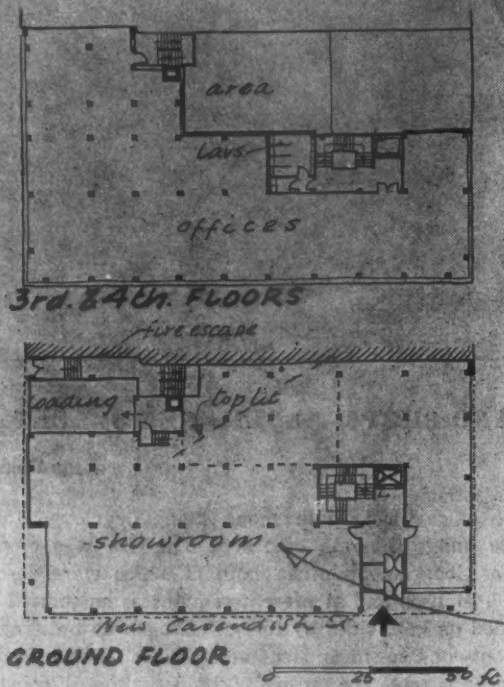
Ernö Goldfinger

A speculative office block, with shops, being developed for two different clients under separate contracts. The site was originally occupied by two Georgian buildings, both of which were destroyed by enemy action in 1940, and at present remains as an unused bomb site. It is bounded on both sides by four- or five-storey buildings and at the rear by one- or two-storey structures associated with buildings fronting to Dover Street. By reason of its situation it constitutes some of the most costly land in London. Although the site is so restricted (24 ft. frontage to each building) a net letting space of 71 per cent has been achieved. The clients have agreed that the buildings may be treated as one, although planned as separate entities, each with its own entrance, staircase and engineering services.

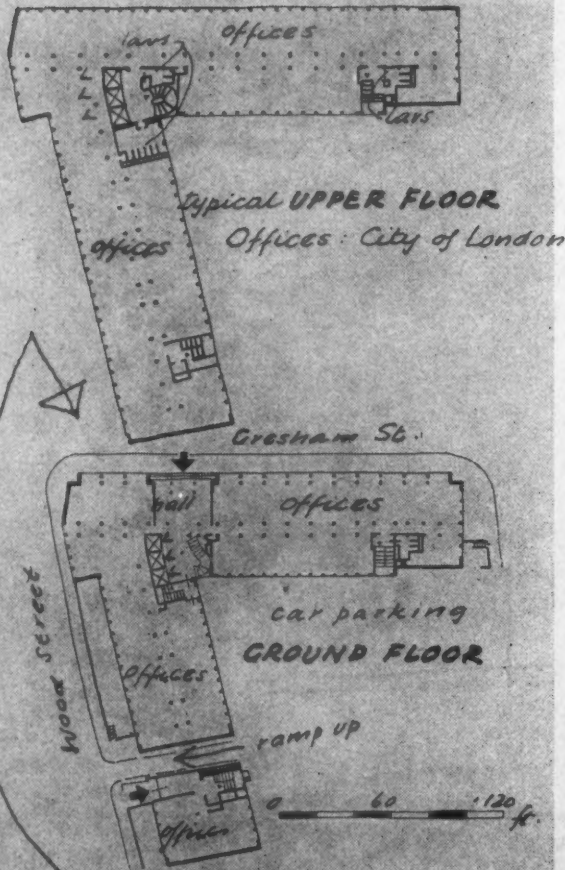
The building has a reinforced concrete frame with precast pre-



4. OFFICE BUILDINGS



Offices etc. New Cavendish St.



stressed floor slabs. Windows incorporate the idea of a photobolic screen which involves the upper windows being recessed, and the top surface of the transoms so formed being used to reflect light into the room. The building as a whole is set back 2 ft. 6 in. from the building line, making the projecting alcove boxes shown on the drawing possible. Heating is by oil-fired burners, circulating hot water to convection heaters in the offices and to radiators in the shops. Hot water is provided by means of a calorifier to which is attached an immersion heater for use in the off season.

Work began in October, 1955.

OFFICES, ETC.: NEW CAVENDISH STREET

Gollins, Melvin, Ward and Partners

The previous buildings on the site were destroyed during the war and for the last few years it has been used as a public car park. The principal front is to New Cavendish Street with short return fronts to Gosfield Street and Great Titchfield Street. The requirement was to provide the maximum amount of well-lit lettable floor space on the upper floors, and space on the ground floor suitable for one showroom or as sub-division into shops. The office accommodation is on four upper floors, approached by a passenger lift and staircase from the separate entrance hall on the ground floor. Lavatories are provided on each floor. There is a loading dock on the ground floor and the basement is devoted to dead storage.

Construction is a reinforced concrete frame and floors, with all beams contained in the floor slab, thus giving a flat ceiling throughout the offices. The outer spandrel walls are faced with precast slabs with a white marble aggregate, and the window mullions are spaced to allow the erection of partitions at conveniently close centres.

Work began in October, 1955. Consulting engineer: W. V. Zinn.

OFFICES: CITY OF LONDON

Trehearne and Norman, Preston and Partners

Clements House is in Gresham Street, conforming to new frontages created by the straightening of the street. It has been designed for quick and economical erection, to provide large unobstructed floor areas suitable for office use. There is a two-storey entrance hall with balconies at the upper level. The courtyard, together with a small area at basement level, will be used for car parking.

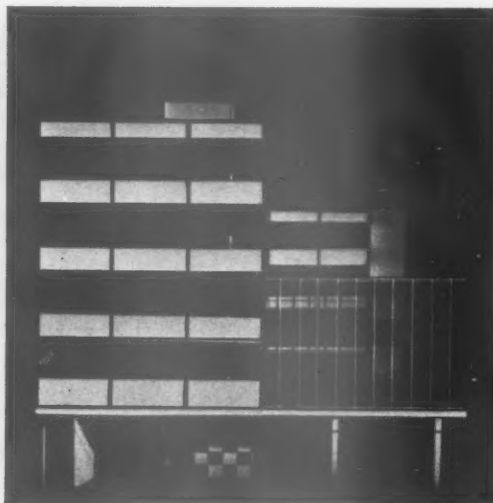
Mass concrete strip foundations support a reinforced concrete frame of the flat slab type, designed to eliminate all beams and so provide flat ceilings throughout the building. Planning is based on a 12-ft.



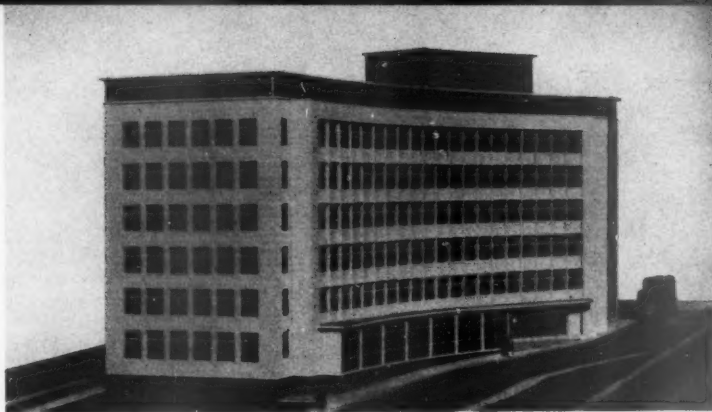
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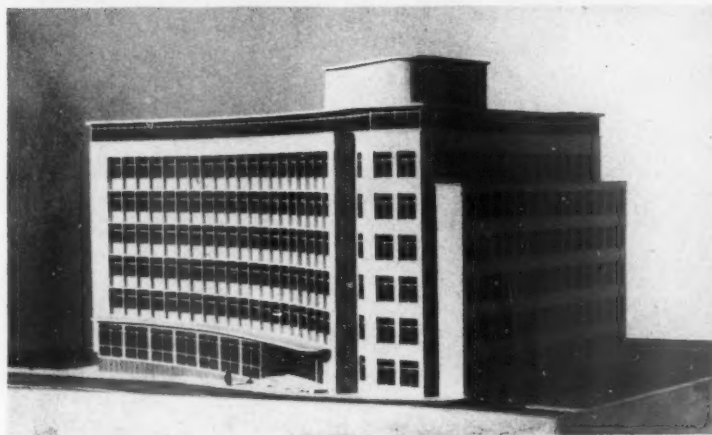
Offices on a bombed site in New Cavendish Street, London, W.1. The ground floor is to be used for shops or a showroom. Above, the main front. Below, the same from Gosfield Street and the Great Titchfield Street front.



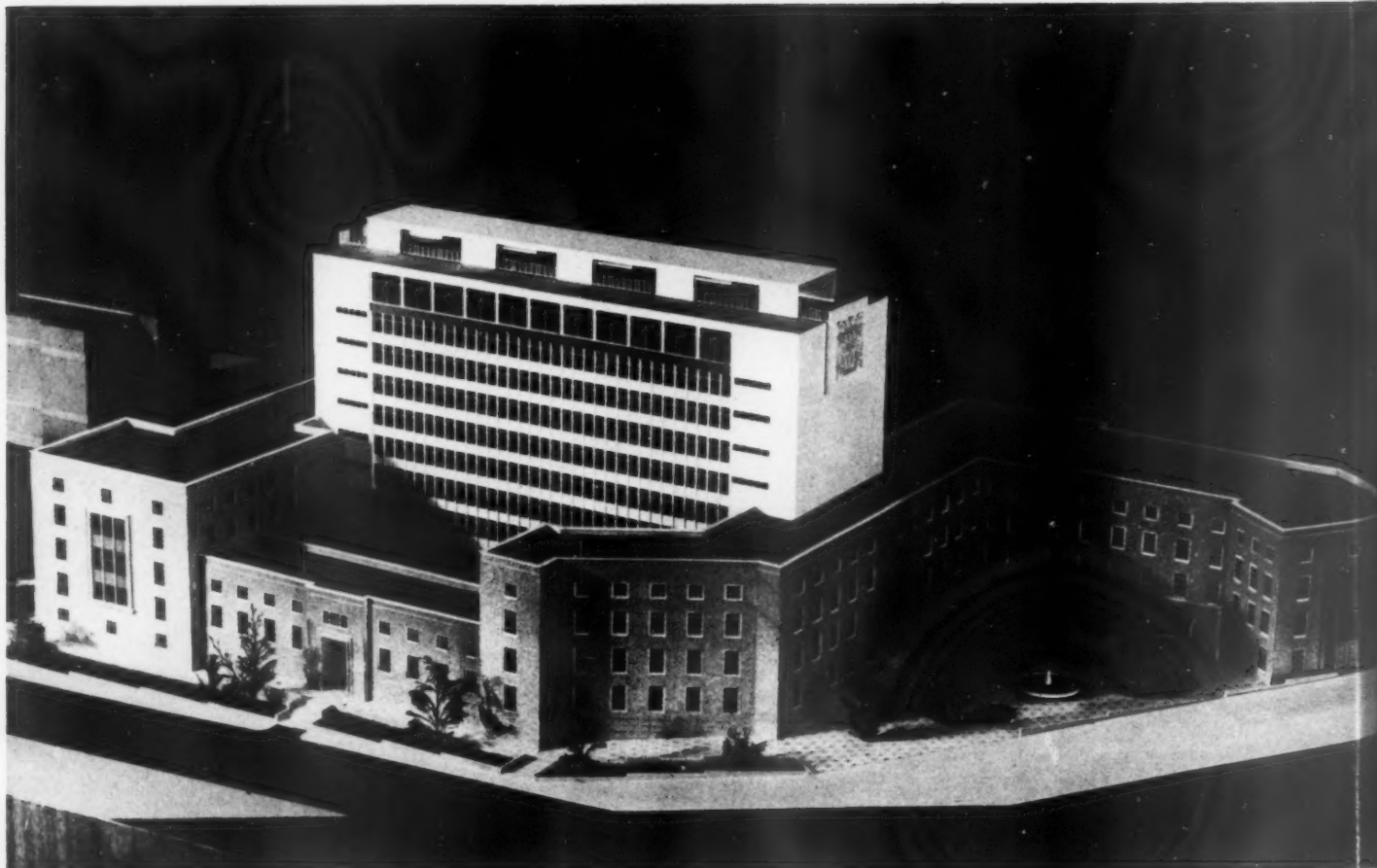
4. OFFICE BUILDINGS

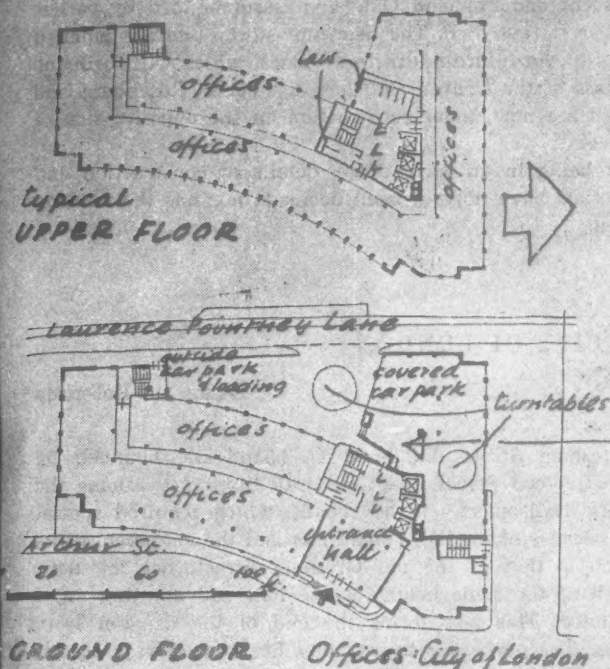


Right, two views of Minster House, an office building in Arthur Street, London. The upper one being from the direction of Upper Thames Street, which is to be widened. The curved entrance facade follows the line of Arthur Street.



Below, civic offices at Leeds, rising behind the earlier offices designed by Vincent Harris: the Woodhouse Lane frontage.





continued from page 40]

grid. Floors are hollow tile with reinforced concrete ribs. The main external walls consist of: where there are no windows, 4½-in. Portland stone so arranged that it can be erected after the inner 9-in. brick wall has been built, to overcome the delay on stone erection; where there are windows, a quartzite facing to the columns and 2½-in. pre-cast window panels faced with quartzite and fixed to 9-in. inner brick walls. The two-storey projection on the Gresham Street side has ends of Portland stone, window panels of mosaic, window jambs of black granite and a grey marble plinth. The lower two storeys of the Wood Street wing are faced with dark coloured tiling. The courtyard walls are of 13½-in. brickwork, using 2-in. hand-made buff and black bricks with recessed joints. The top two floors of the building have continuous glazing. The open pergola on the roof is of reinforced concrete with metal uprights.

Work began last summer and is expected to be finished by the spring of 1957. Consulting engineers: Travers, Morgan and Partners. Quantity surveyors: Cyril Sweett and Partners.

OFFICES: CITY OF LONDON

Trehearne and Norman, Preston and Partners

The site of Minster House, Arthur Street, is in a declaratory area large parts of which have been acquired by the City Corporation for the widening of Upper Thames Street and for the formation of a new road at the northern end of the site. The remainder of the site has been acquired as a freehold by the clients, who are a group of insurance brokers and underwriters now occupying premises in various parts of the City. They wished to bring all their companies under one roof, but to provide each with its own board room, etc. The site has a fall of 13 ft. from north to south, and this, together with the peculiar shape left after road widening and the narrowness of Laurence Pountney Lane, created difficult problems both of planning and elevational treatment. The entrance had to be placed at the northern end of the site, away from Upper Thames Street. The garage is at the back on the ground floor, and is placed here rather than in the basement to avoid a long ramp with subsequent loss of useful space, to leave the basement available for filing, to avoid the need to provide a separate loading area and to save cost.

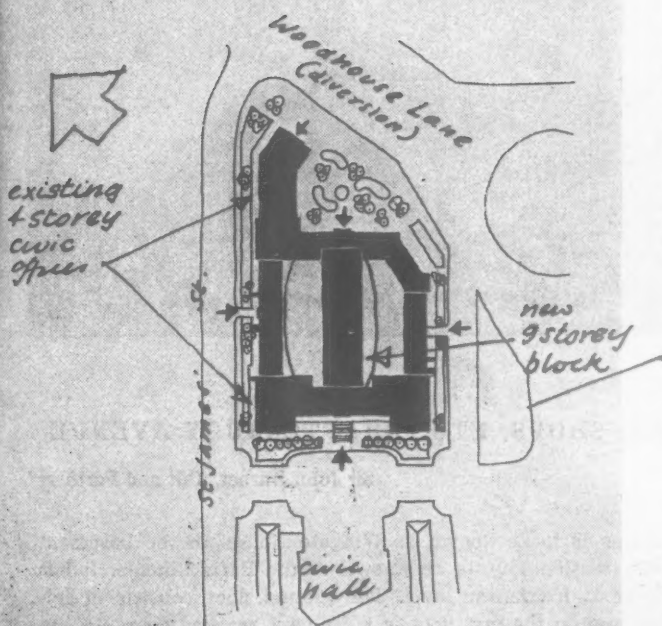
The proximity of the site to the river necessitated pile foundations to a considerable depth. Up to ground-floor level construction is of reinforced concrete, to allow time for the fabrication of the main structural steel frame. External walls consist of 4 ins. of Portland stone tied back across a cavity to a 4½-in. inner wall. The external columns are within the thickness of the wall. External facing materials are Portland stone for the main walls, black granite for the recessed plinth, polished Roman stone with bronze window frames for the ground-floor projection on the Arthur Street side and green Westmorland slate for the precast slabs forming the window panels, and for the roof structure. The top floor has continuous glazing.

Work began in January, 1955, and is due to be completed by the end of this year. Quantity surveyors: Franklin and Andrews.

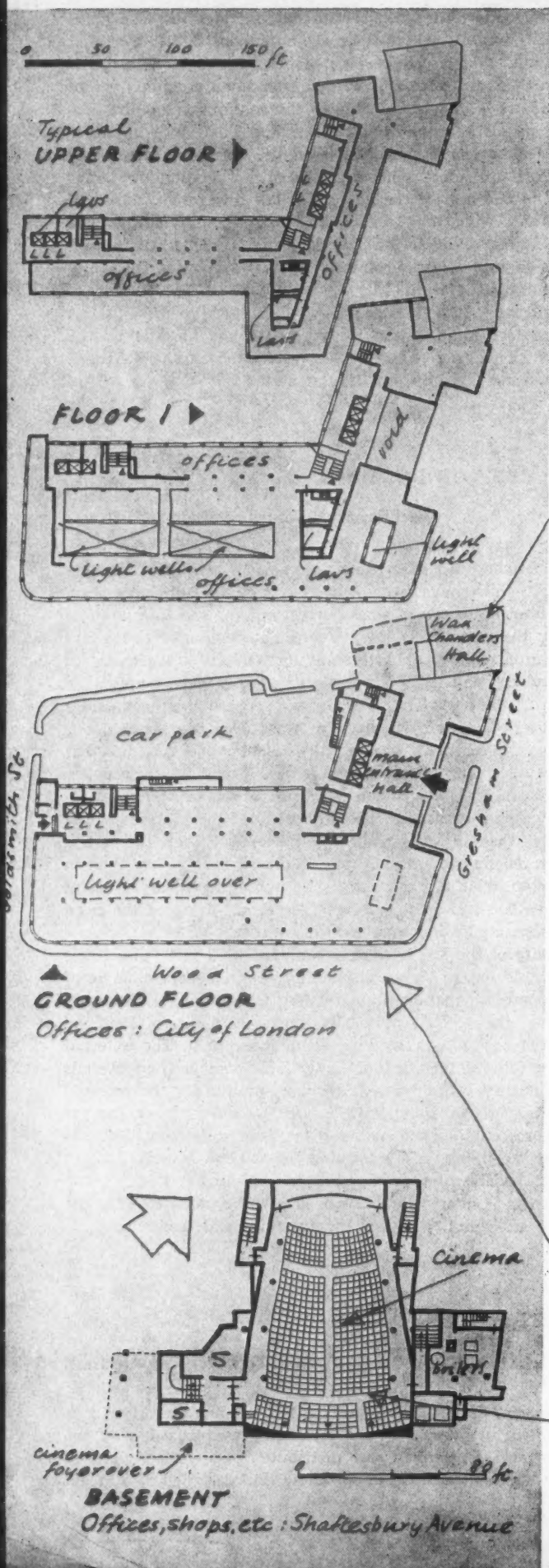
CIVIC OFFICES: LEEDS

R. A. H. Livett (City Architect)

To house various Corporation departments, including the City Architect's department, which are at the moment decentralized, with the result that several departments are distributed over various parts of the City. The site is at the rear of the Civic Hall designed by Vincent



4. OFFICE BUILDINGS



Harris in 1933. It is bounded by St. James' Street, Woodhouse Lane, Portland Crescent and Portland Gate and is surrounded by earlier civic offices four storeys high. The new nine-storey block is planned at right angles to the future multi-storey block, which will form the dominating mass of the Central Colleges (by Yorke, Rosenberg and Mardall) which are now under construction on the opposite side of St. James' Street.

The project being in an early stage, details of construction and finishing materials have not yet been decided; nor has the starting date been fixed.

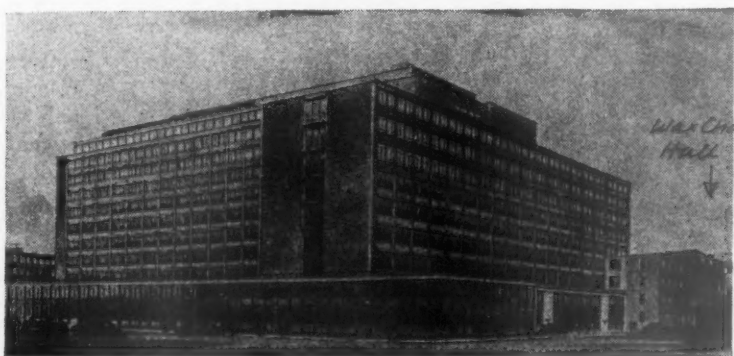
OFFICES: CITY OF LONDON

Easton and Robertson

At 2-12, Gresham Street, E.C.2, on an island site bounded by Gresham Street, Wood Street and Goldsmith Street. It adjoins the Wax Chanders' Hall, shortly to be rebuilt, which required special consideration because of the hall's small size and the alignment of its frontage which is that of the old Gresham Street, not the new. Hence, a block of the same height as the hall and abutting on it has been planned. This also forms the end of the drive-in from Gresham Street. The purpose is to provide office and banking accommodation, etc. There are approximately 185,000 sq. ft. of lettable space on ten floors, plus a basement and sub-basement. Of this space some 42,000 sq. ft. consists of strong room and storage space located below ground level. The main blocks are 50 ft. in width. Directors' lavatories and staff lavatories for both sexes are on every floor except the ground floor. Boiler-room and ventilation plant room are in the basement. The main entrance hall, approached from Gresham Street, is two storeys high. A second entrance is off Goldsmith Street. The building will be served by seven high-speed lifts. An open-air car park at ground-floor level accommodates 50 cars.

Construction is reinforced concrete, with considerable use of precast frames, etc. External finishing materials for the ground- and first-floor columns are green Westmorland slate with a granite plinth. Above that level the vertical members have a Portland stone casing; the horizontal members are precast. Return walls are in facing brick.

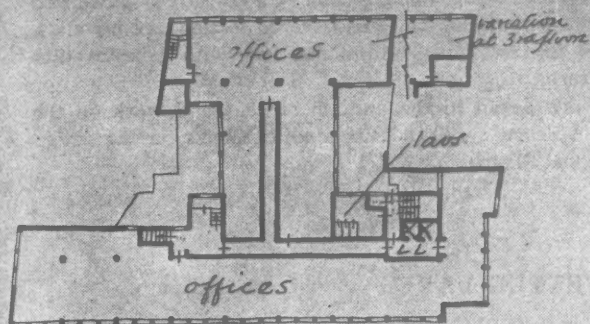
Work will start in the spring of this year.



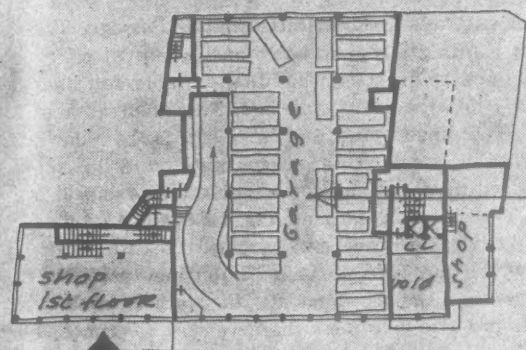
OFFICES, SHOPS, ETC.: SHAFTESBURY AVENUE

Sir John Burnet, Tait and Partners

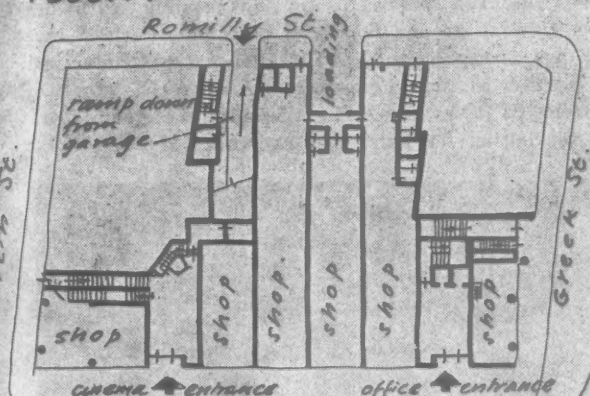
The building is to be known as Wingate House. In the basement is a cinema (seating 750), to be known as the Paris Cinema. It has a large foyer at mezzanine level. The ground floor consists of lettable shops, and on the first floor is a car park reached from a ramp



UPPER FLOORS

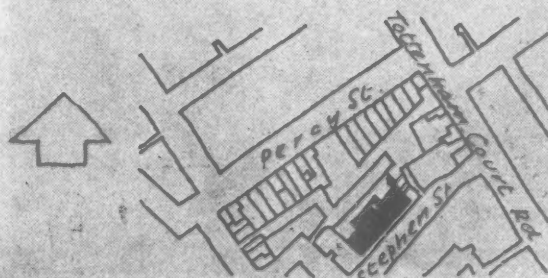


FLOOR 1



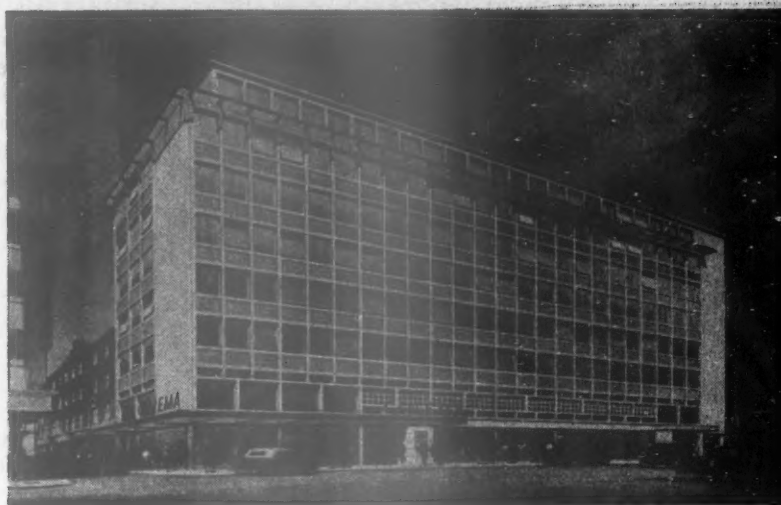
GROUND FLOOR

Offices, shops etc.,
Shaftesbury Avenue



SITE PLAN

Office & Warehouse:
London



in Romilly Street. This is the first time in London that the mandatory requirements of the London County Council with regard to car-parking space within the area of the building have been met by placing it on the first floor. The open nature of the car park obviates the use of mechanical ventilation, and many of the fire regulations that apply to basement garages and car parks are also avoided. The upper floors of the building contain offices.

It is of steel frame construction with hollow-tile floors and a facing of stone.

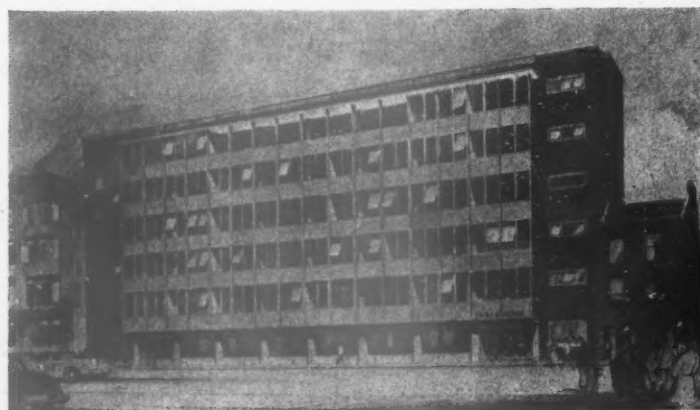
Work on the site has already begun.

OFFICE AND WAREHOUSE: LONDON

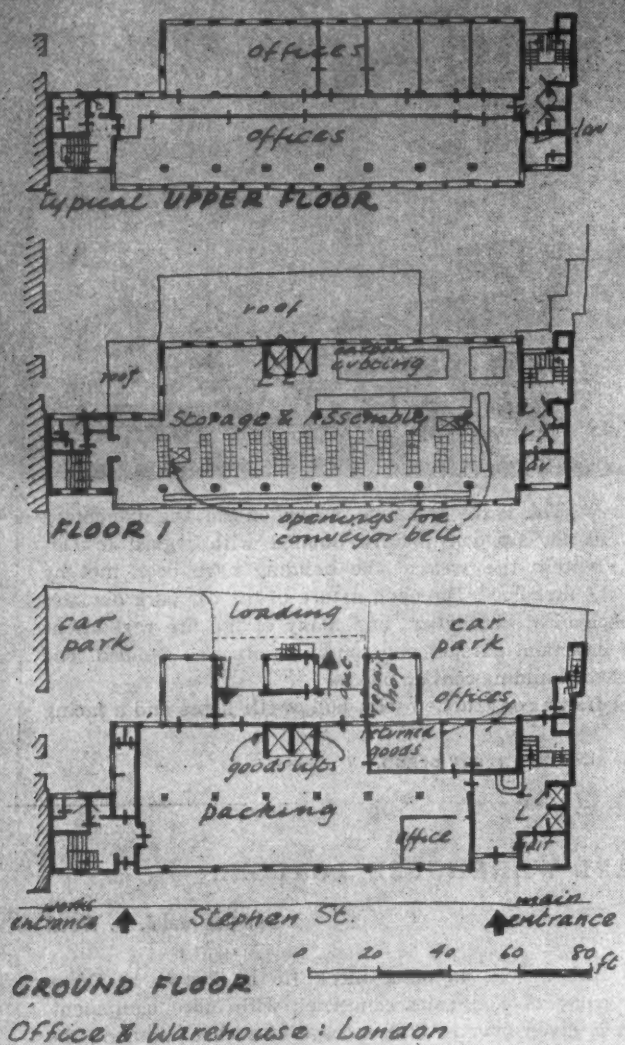
Douglas and J. D. Wood

In Stephen Street, W.1, an office block (to be known as Ofrex House) for a group of companies concerned with office equipment. The basement is given over to bulk storage of such equipment, the ground floor to delivery, despatch and packing, and the first floor to the sorting and assembly of orders. A conveyor belt between ground and first floors runs between free-standing columns and a cantilevered window. The offices are on the second and third floors, the directors' accommodation on the fourth floor and a canteen, club rooms and caretaker's quarters on the fifth floor. On the roof is a terrace and roof garden. The total accommodation is 45,500 sq. ft., the plot ratio being $3\frac{1}{2}:1$.

Construction is a reinforced concrete frame on mass-concrete bases, with brick infilling and hollow-tile floors. The cantilevered window wall to Stephen Street is in aluminium. Facing bricks are red sand-



4. OFFICE BUILDINGS



faced. The ground floor is faced with Portland stone. Copings and window dressings are artificial stone. Normal windows are of galvanized steel; panels between windows, of cantilevered section, are ply-glass. Roof decking is in three-layer bituminous felt, with asbestos tiles inset for the terrace.

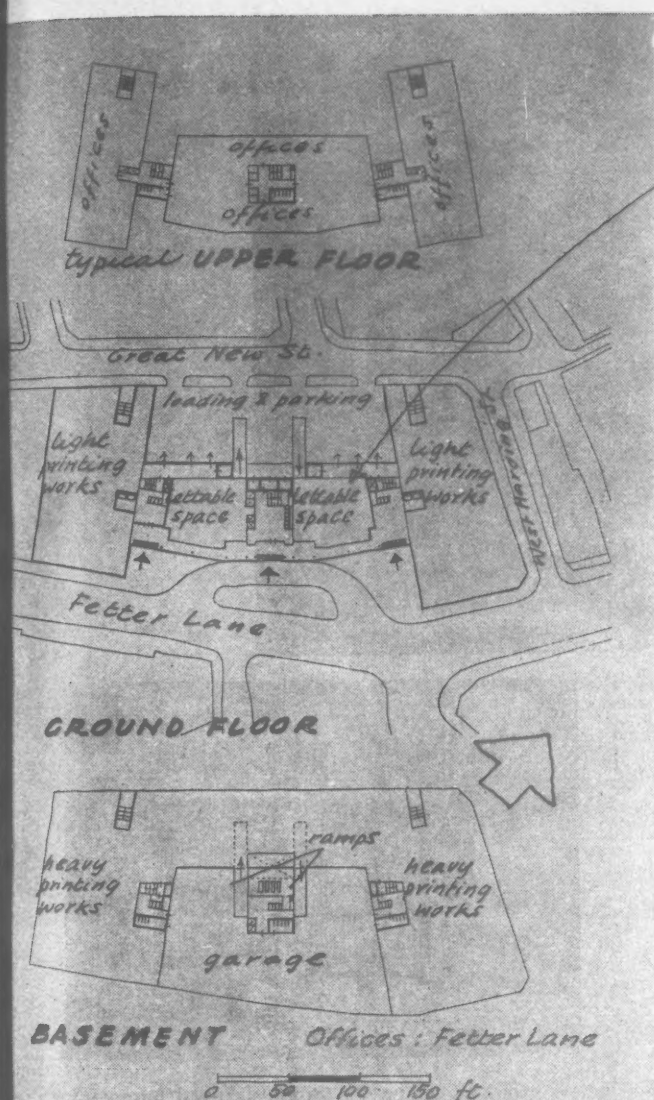
Foundation work began in the autumn of 1954 and work on the superstructure in February, 1955. Associated architects for the design stage: Wornum and Playne.

OFFICES: FETTER LANE

Edward D. Mills

On an almost island site, adjoining Trinity Church Passage. The site is crossed by West Harding Street and the small area cut off by this street is covered by a single-storey building suitable for light industry, except for a public house at one end. The main area of the site is developed according to the plot-ratio of 5:1 laid down by the City Corporation, and consists of three units, allowing the building to be constructed in stages and for separate ownership at a later date if required. The object in the planning has been to provide the maximum well-lighted office space and to place the lifts, staircases, etc., where they will not take up valuable letting space. The basement has been planned to accommodate the largest modern printing presses, and in order to give these the necessary clearance of 30 ft. and a measure of natural daylight and ventilation, its ceiling has been raised above road level. This has also made it possible to provide loading-dock facilities for ground floor and basement. Part of the basement, which has a lower ceiling, is allocated to central services and to parking space for 50 cars. The parking space is reached by two ramps, entered from Great New Street. In addition to the ground-floor space available for letting for light printing works or other light





industry, there is also lettable ground-floor space under the offices suitable for banks, a post office or similar uses. The office floors above, the three blocks of which vary in height (see drawings), have a total area of nearly 200,000 sq. ft.

The building is a framed structure with fireproof floors and staircases enclosed by curtain walling, consisting of metal windows with infilling panels up to cill level of some self-cleansing material (not yet decided) such as glass, metal or precast polished slabs.

OFFICES, SHOPS, ETC.: ST. MARTIN'S LANE

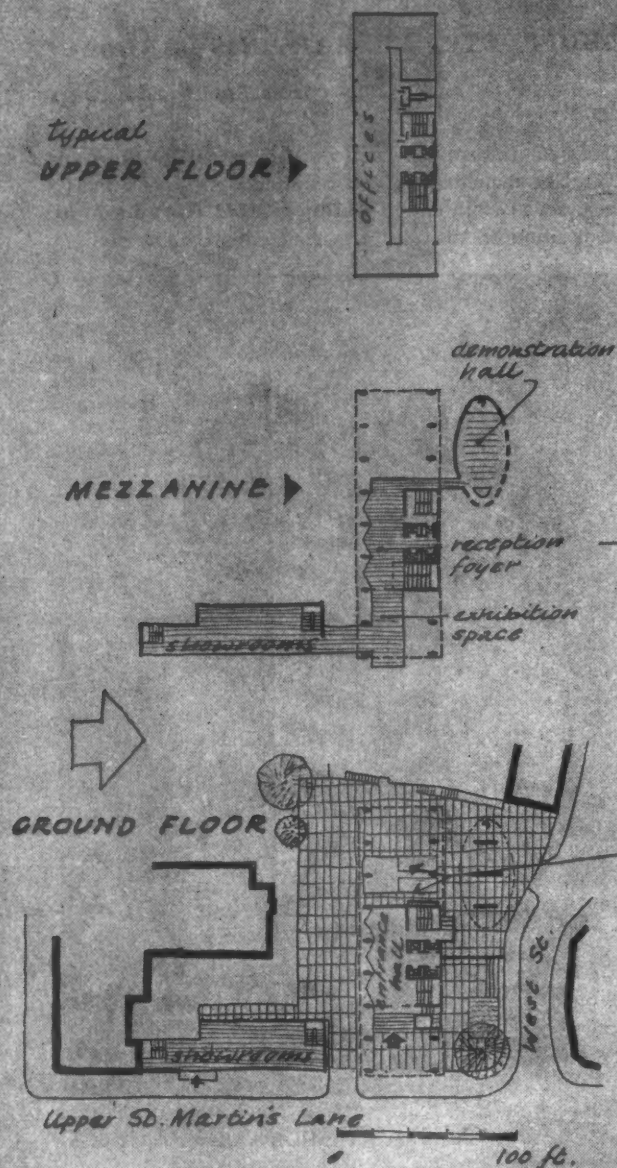
Basil Spence and Partners

For Thorn Electrical Industries; part to be occupied by the company and part let. The main bulk of the building comprises a multi-storey office block set at right-angles to Upper St. Martin's Lane. Its area, shape, and position on the site were controlled by the daylight



indicators operated under the LCC town planning regulations for buildings over 100 ft. high. On the ground floor is the main foyer; on the mezzanine, the foyer and exhibition area for Thorn exclusively, their lessees using only the ground floor. The top floor accommodates, in addition to tanks and services, a board-room and its ancillaries as a penthouse. Showrooms on two storeys front Upper St. Martin's Lane, with shop windows at street level. On the north side—along West Street—is a demonstration theatre—a concrete shell supported at mezzanine level by columns—seating 250. It serves as a foil to the main office block. Vehicular access to the site is from Upper St. Martin's Lane under the first floor of the showrooms, and from West Street. A car park for 35 cars is provided to comply with LCC regulations. 4,000 ft. of dead storage space and the oil-fired boilers

4. OFFICE BUILDINGS



Above, from down St. Martin's Lane. Right, close-up of the open ground floor with foyer at mezzanine level over the entrance.



are also housed below ground level in the single-storeyed basement. Two car lifts take vehicles to and from the garage.

Construction is reinforced concrete with precast columns and hollow-tile floors, the walls between window heads and cills forming edge beams. Bracing for wind is by the service and the gable end walls. Four high-speed lifts are provided, one of which can be converted at the press of a switch to a firemen's lift, with alternative access to the fire lobbies on each floor. There are two staircases, one being the fire stair. Materials are 'natural' (that is, they do not require redecorating, only occasional cleaning). The gable walls are Portland stone, and the facing of the edge beams between window head and cill green Westmorland stone. On the east gable wall fronting Upper St. Martin's Lane it is proposed to site a sculpture, possibly by Eduardo Paolozzi. It will occur above a glazed projection of the mezzanine over the pavement, which gives a fine prospect of St. Martin-in-the-Fields.

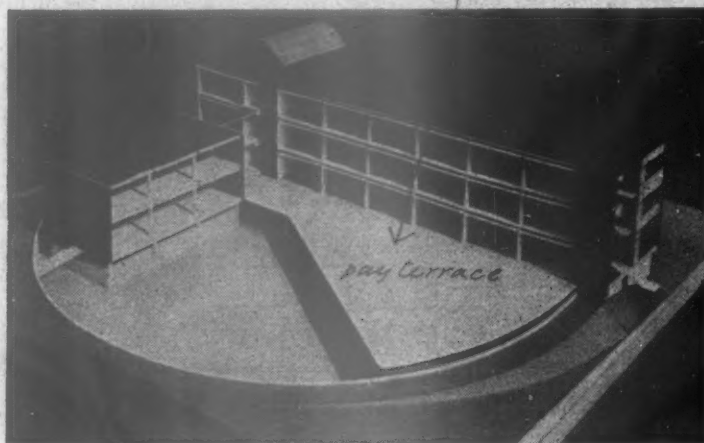
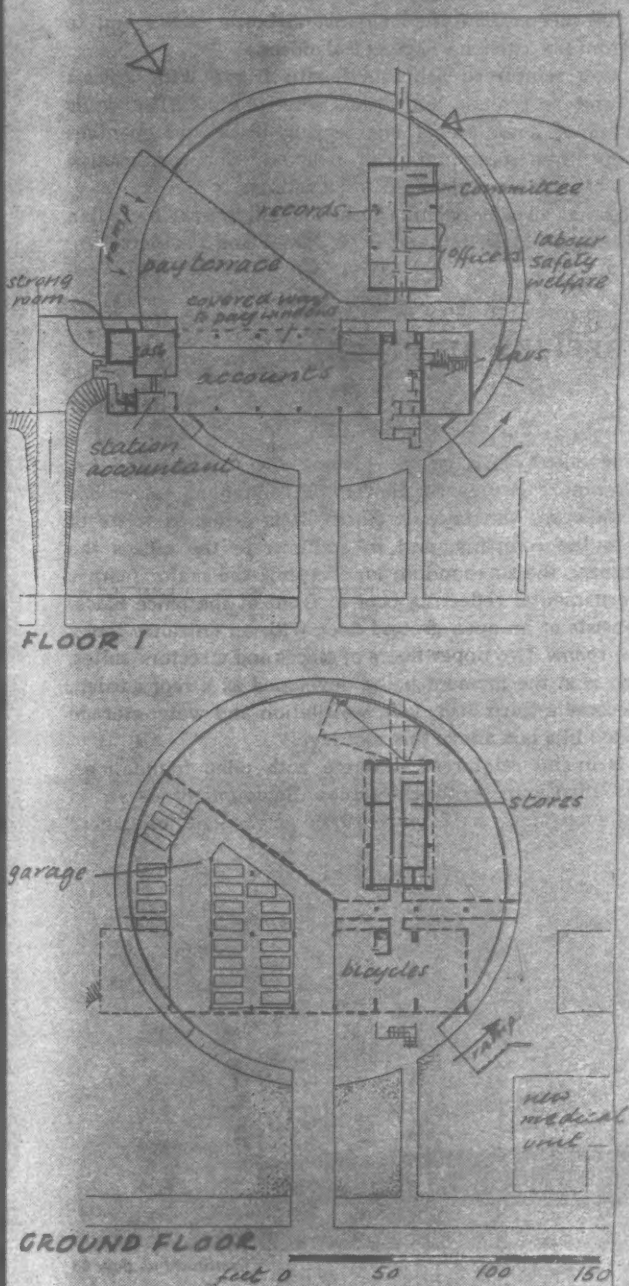
5 INDUSTRIAL BUILDINGS

INDUSTRIAL OFFICES: EAST HAM

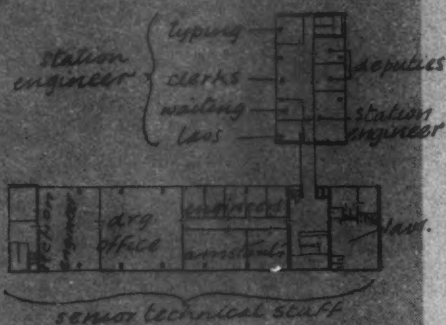
Elie Mayorcas

To accommodate the technical and control staff of the Beckton gas works, belonging to the North Thames Gas Board. The aim was to provide the lightest and airiest possible working conditions in the centre of a very heavily industrialized area. The site is a disused gasholder foundation, consisting of a cylinder approximately 200 ft. in diameter and 30 ft. in depth, with a raised central dumping, the whole built in mass concrete, backed by puddled clay. The surrounding ground is waterlogged and of very poor bearing quality. On the ground floor there is garage accommodation for staff cars, motor cycles and bicycles and various stores for the keeping of records. On the first floor are the offices of the Accounts Department and the Labour, Safety and Welfare Departments, on the second floor the offices of the station engineer and his senior technical staff and on the third floor a canteen and games room. The building has been designed to allow for future expansion by the addition of two floors on each wing, and the engineering and lift services have been so designed to permit this with the minimum disturbance to the existing structure. There is an underground emergency works control room. At first-floor level there is a suspended pay terrace which will enable a large number of men to be paid without entering the building.

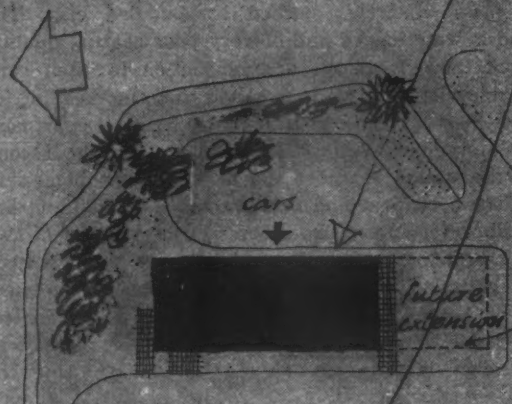
The building has an in-situ reinforced concrete framed superstructure on piled foundations, firebreak walls at staircases, etc., with reinforced concrete and hollow pot floors. The entire building has been designed on a module of 3 ft. 4 ins. Choice of finishing materials has chiefly been governed by the necessity of minimizing maintenance and to be self-cleansing. Curtain walling is aluminium, with



5. INDUSTRIAL BUILDINGS



FLOOR 2 Industrial Offices: East Ham



SITE PLAN
Factory Offices: Derby



FLOOR 1



GROUND FLOOR

0 20 40 60 80 ft

vitreous infill panels and faience tiles to the end walls, etc. To facilitate the cleaning of the curtain walling an overhead track for the suspension of cradles has been incorporated in the external design. Internally, floors generally are in plastic tiles, with plaster finish to concrete walls. Partitions have been designed to be demountable if required. Steam from the works will provide domestic hot water and heating. The building is mechanically ventilated.

Work began in July, 1955. Assistant architects: L. E. Tatum, Marjorie Hichisson and J. Keable.

FACTORY OFFICES: DERBY

Basil Ward (of Ramsey, Murray, White and Ward)

An administration block for the Rolls-Royce engineering works, adjoining the site of the present works. The accommodation includes general office space, executive offices, a drawing office, a conference room with model gallery, canteens, etc. The form of the building was determined by the need to insulate against airborne sound and to prevent smells from the kitchen reaching the offices.

Construction is a reinforced concrete in-situ frame with precast concrete floors and roof slabs and brick screen walls. The walls nearest the source of noise are of engineering brick and openings in them are kept to a minimum. Flat beamed floor construction allows clear runs of services in the suspended ceilings.

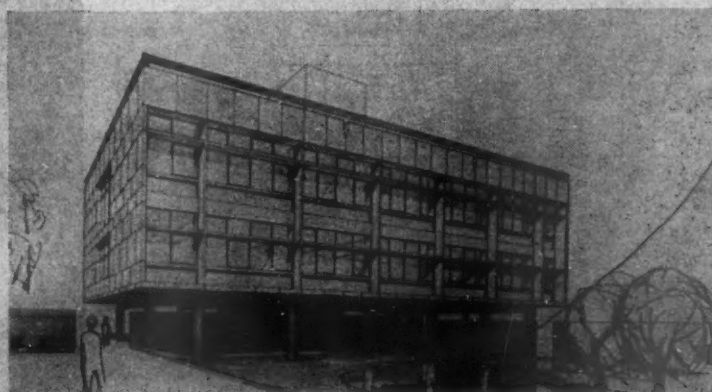
Site preparation has already begun. Consulting engineers: McLellan and Partners, Merz and McLellan and R. T. James and Partners.

FACTORY OFFICES: BIRMINGHAM

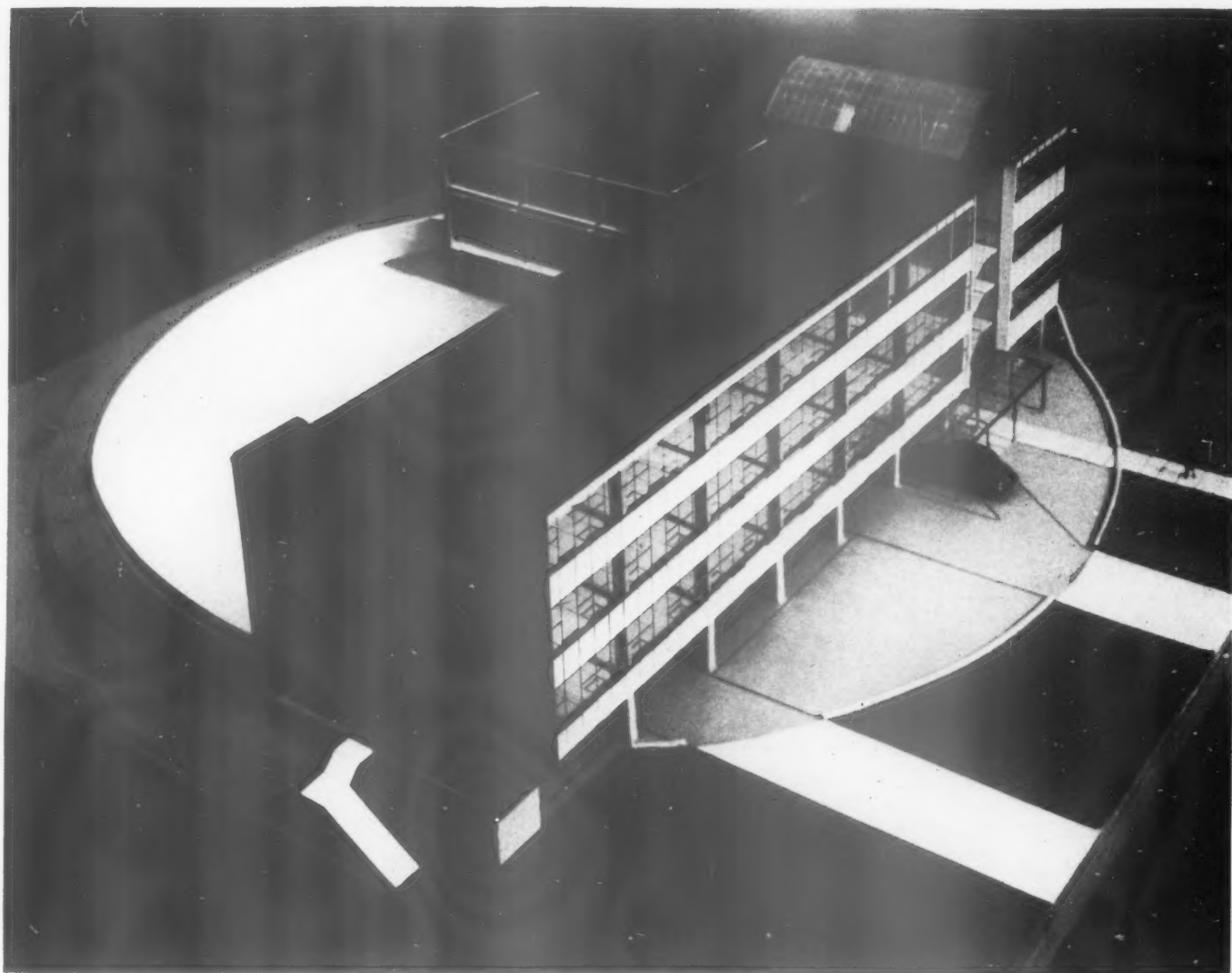
Ernö Goldfinger

A free-standing office block on the factory site of Carr and Co. (Paper) Ltd., Cranmore Boulevard, Shirley, Birmingham, to replace some old and temporary timber-built offices. It is designed to be of prestige value to the company, and in addition to the offices the architect is designing the surrounding landscaping, the major feature of which is an ornamental reflecting pool in front of the office block. The building consists of an open ground floor with an entrance lobby and some service rooms, two upper floors of offices and directors' suites, and a roof which is at the moment being developed as a roof garden, but will later become a third floor. Lift, ventilation and water-storage services are located in a box above this roof level.

Construction is in-situ reinforced concrete with piled foundations. Windows are designed with photobolic screen. Some partitions are in 4½ in. brickwork, where they are expected to be permanent; elsewhere

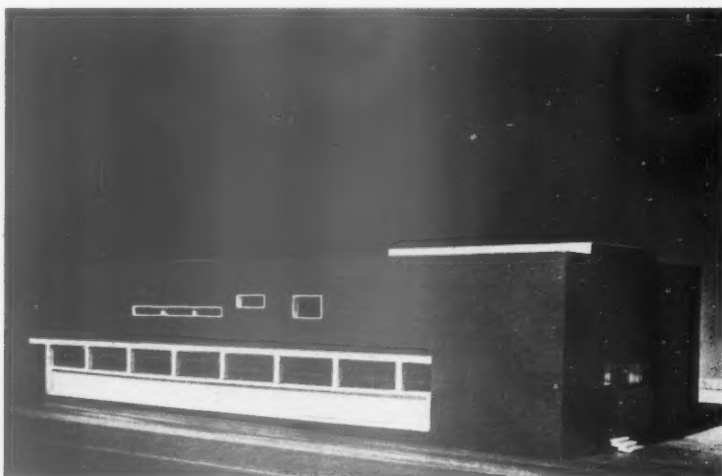
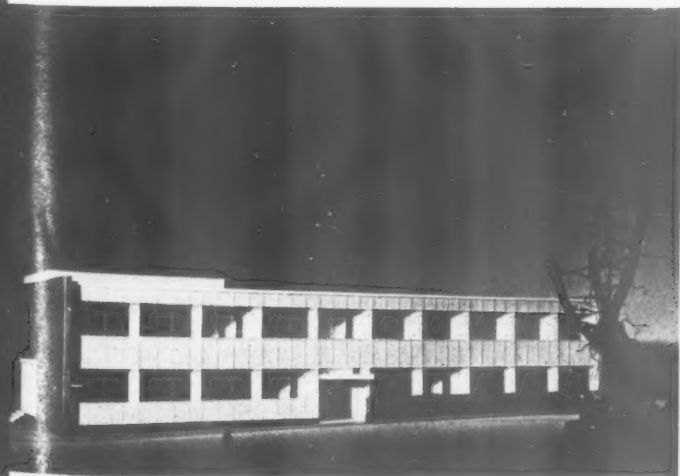


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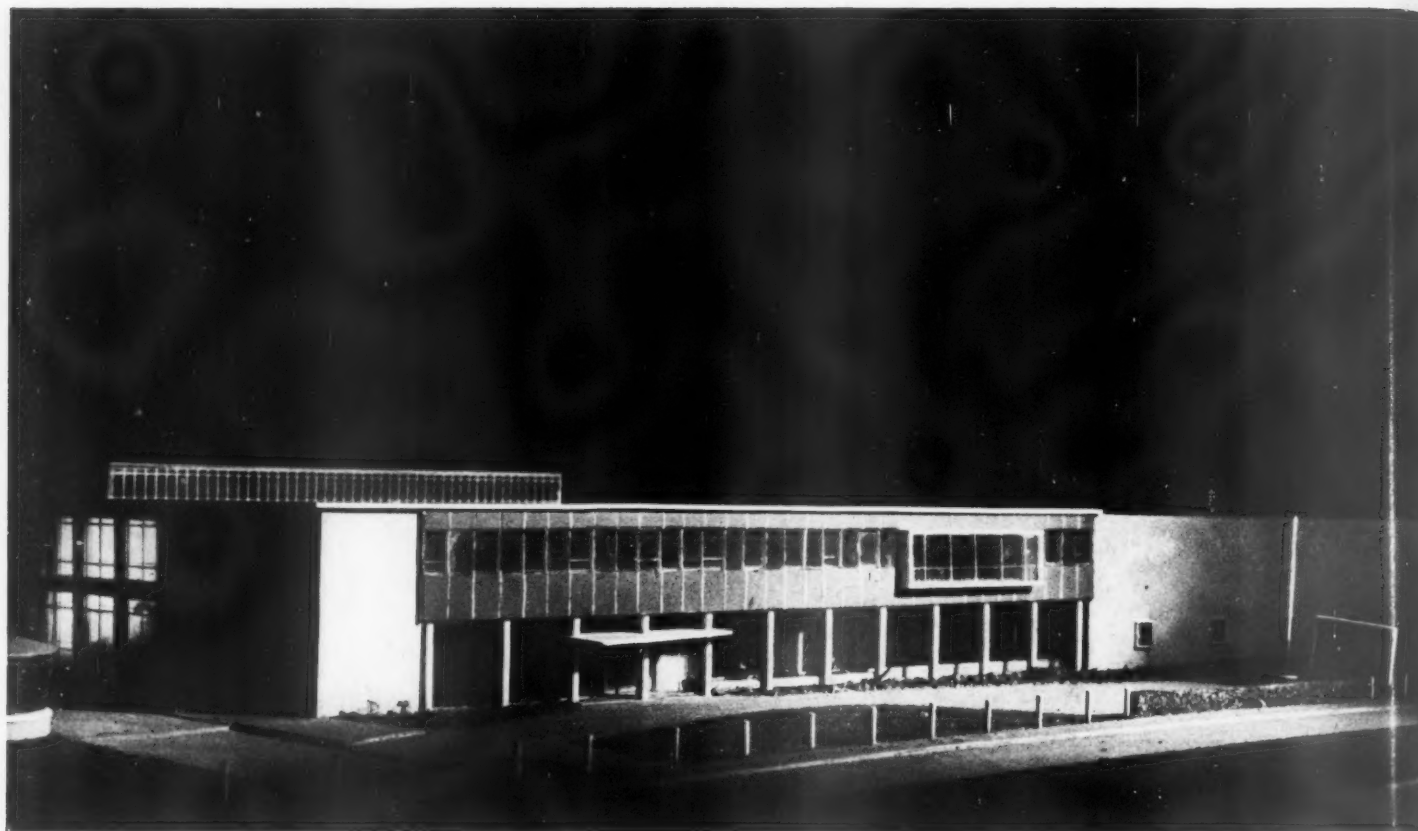


Above, offices for the technical and control staff of the North Thames gasworks at Beckton—architect, Elie Mayorcas. The circle represents a disused gasholder on the foundations of which the offices are sited.

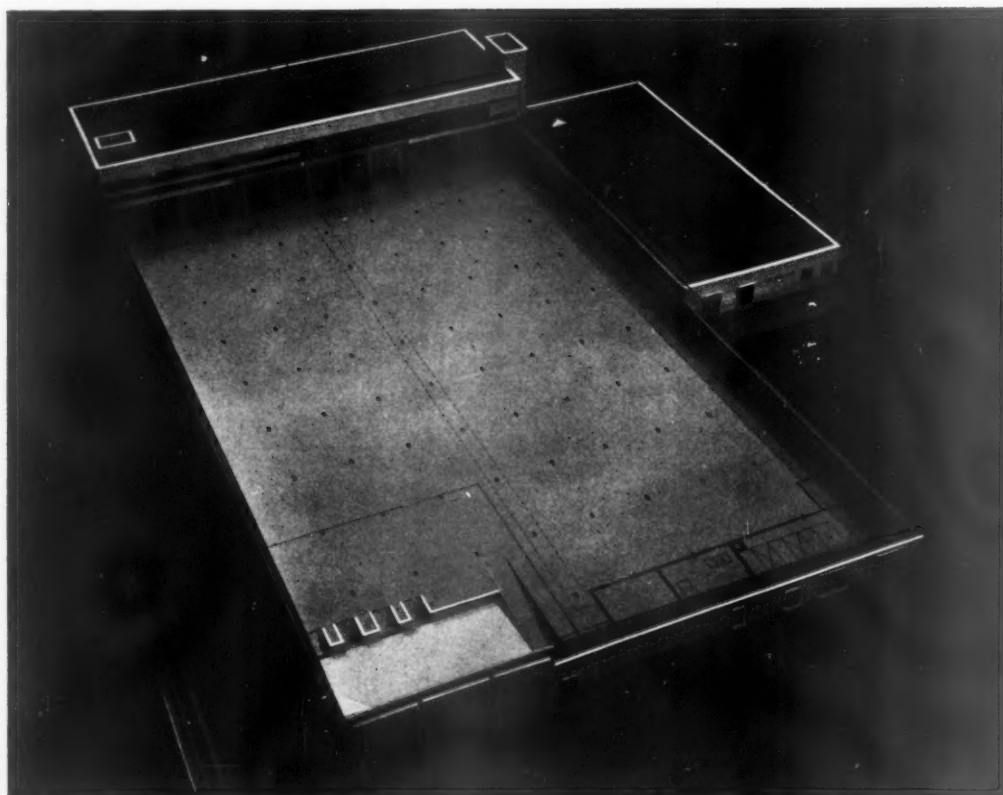
Below, the two sides of the administration offices at Derby, alongside the Rolls Royce engineering works.



5. INDUSTRIAL BUILDINGS



Above, the Aspro factory, Slough, showing the two-storey office and workshop block on the eastern side of the site.



Right, cosmetic factory at Eastleigh. In the model the roof of the main warehouse area has been made transparent to show the interior layout. The factory proper is on the first floor of the block at the far end. On the right is the single-storey administration block.

continued from page 50]

demountable pressed metal units are used. Heating and hot water are provided by calorifiers activated by steam from the factory boiler-house situated approximately 200 ft. from the building. Convector heaters are used generally, with some radiators in the ground-floor service rooms. A plenum extract ventilation system is installed throughout the office areas, extracting from the false ceiling areas and adjustable openings to each of the offices. The vertical runs of the various services are incorporated in chases left in the columns.

Work began in October, 1955.

FACTORY, ETC.: SLOUGH

J. Douglas Mathews and Partners

For the Aspro group of companies, manufacturers of pharmaceutical products, who also have a packaging business dealing with a wide variety of goods. The requirement was for a single building containing production areas, raw materials storage, warehousing space for finished products, offices, staff canteens and recreation rooms and service laboratories and workshops (including facilities for servicing travellers' cars). The site, west of Slough on the south side of the Bath Road, adjoins the company's sports ground.

The western part of the building contains the production, storage and warehouse areas and is one storey high. The eastern part is a two-storey block containing the offices, workshops, etc. The ceiling height required for production is less than that required for storage and warehousing, but the former requires electrical and mechanical services which are housed in the extra roof space. The production area is without windows, being wholly artificially lighted and ventilated, allowing great flexibility of planning. The office block employs the American system of housing all staff except the highest executives in one large undivided space. This is on the first floor above the canteen and staff accommodation and a 'foyer' designed for general circulation and for the display of products, etc. Above the entrance are the directors' offices. The workshops are at the south end of the building adjoining the production area.

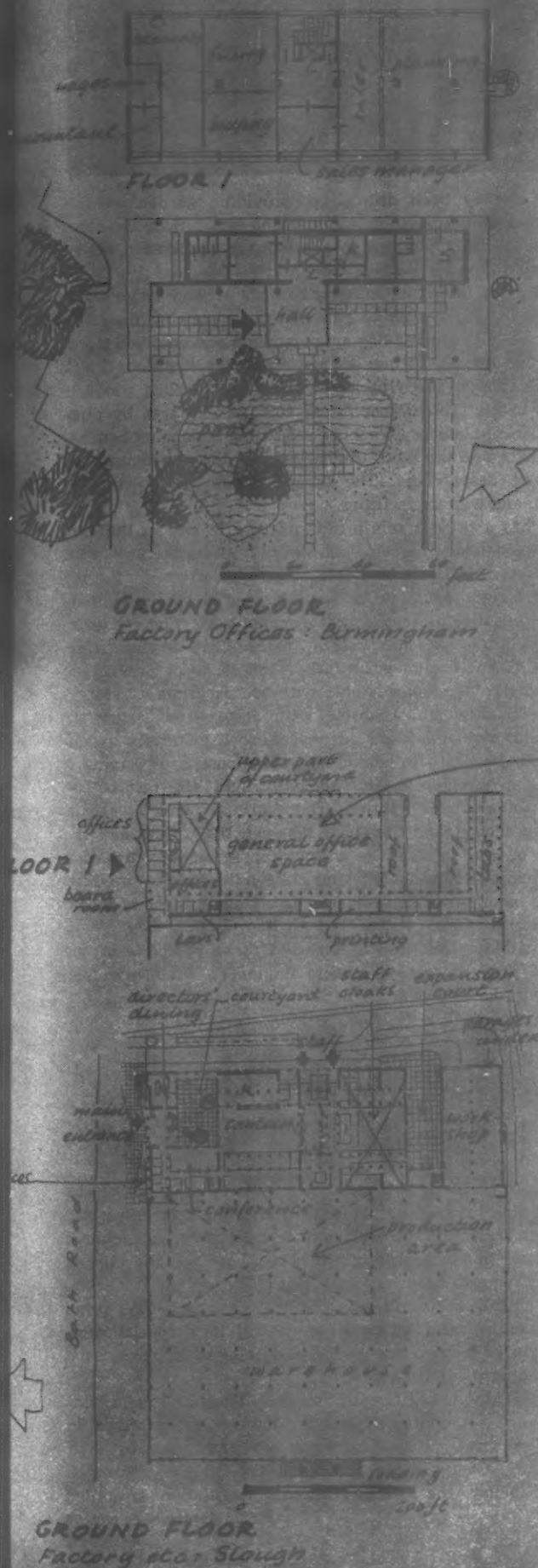
The production, storage and warehouse portion has an uncased steel frame and light lattice steel roof giving a clear height of 20 ft. The permanent north wall is in buff-coloured brickwork. The wall at the west end, demountable for possible future expansion, is in aluminium framing with plastic panels. The office and service block is also steel framed, with precast reinforced concrete floor panels, but the floor spanning the canteen is covered by a post-stressed precast concrete deck 60 ft. wide, with the ventilation and other ducts within the members. Ground-floor external walls are brick, glass-brick panels or glass screens and the first floor glass or plastic panels.

Site work started in July, 1955, and the building is due to be completed by the end of this year. Partner responsible: E. D. Jefferiss Mathews. Chief assistant: E. J. Hill. Quantity surveyors: Harris and Porter. Structural engineer: A. C. Aston. Electrical and mechanical engineers: G. H. Buckle and Partners.

FACTORY: EASTLEIGH, HANTS

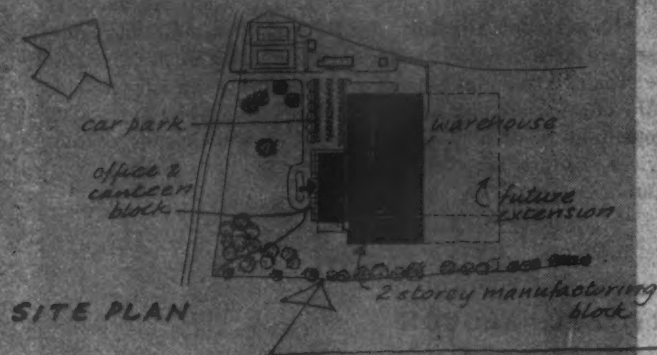
Edward D. Mills

The site for this factory for William R. Warner and Co., cosmetic manufacturers, is surrounded by local authority housing and bounded on one side by the proposed Eastleigh by-pass. The scheme illustrated comprises half the eventual development, and a landscape plan for



5. INDUSTRIAL BUILDINGS

2 storey manufacturing block



the whole has already been drawn up, providing gardens, tennis courts and a small tennis pavilion. Car parking will adjoin the office building, which has been planned to allow future expansion of the office and administration section.

The ground floor of the main building consists of very large warehouse area used for the storage of raw materials, packing materials and finished goods, with loading-bay arrangements and enclosed stores for special goods. Manufacturing is carried out at first-floor level, the raw materials being taken up by lift and the finished products being conveyed to the ground-floor filling and packing area by pipelines on to the packing benches. Packing and filling is done on benches with conveyor belts, and the goods discharged into the warehouse area for casing before despatching. The administration block contains offices, a canteen and welfare facilities.

The building has a precast reinforced concrete frame. In the case of the warehouse, standard precast columns and beams are used with a lightweight metal flat roof. The offices have prestressed concrete beams. The two-storey manufacturing and finishing block also consists of precast, prestressed reinforced concrete frame with concrete floors and a metal deck roof. External walling to the office and manufacturing block is 11 in. cavity brickwork, using a local hand-made facing brick, and the warehouse is clad with precast concrete storey-height panels of lightweight concrete with an exposed aggregate external finish and a smooth-faced internal finish to minimize expensive surfaces. Windows are in metal, the warehouse area having a patent-glazing strip window to give some daylight, the rest of the area relying upon artificial lighting. There are suspended ceilings except in the warehouse, and the space between the ceiling and the structural floor or roof is used as a duct for services, ventilation trunking, etc. Heating is by hot air, and air conditioning is provided in certain of the laboratories and manufacturing areas, some of which also require dust extraction.

Work began in May, 1955, and is expected to be complete in the unusually short time of one year. Site engineer: Frederick Lee. Quantity surveyor: L. W. Clark.

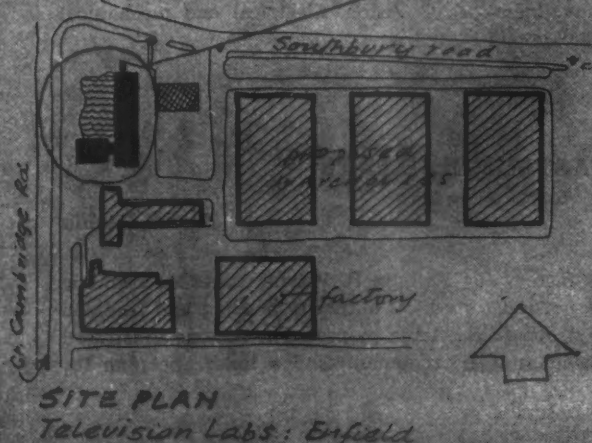
TELEVISION LABORATORIES: ENFIELD

G. A. Jellicoe and Partners

For research into colour television with a view to its development as a commercial undertaking, including the pilot production of certain components such as transistors and cathode ray tubes. As detailed requirements could not be closely planned at the start, the clients, Sylvania-Thorn, requested the utmost flexibility of plan. Special requirements included air conditioning to provide a dust-free atmosphere, strict humidity and temperature control in a special area, and the reduction of noise from traffic and internal sources, such as workshop machinery and lifts.

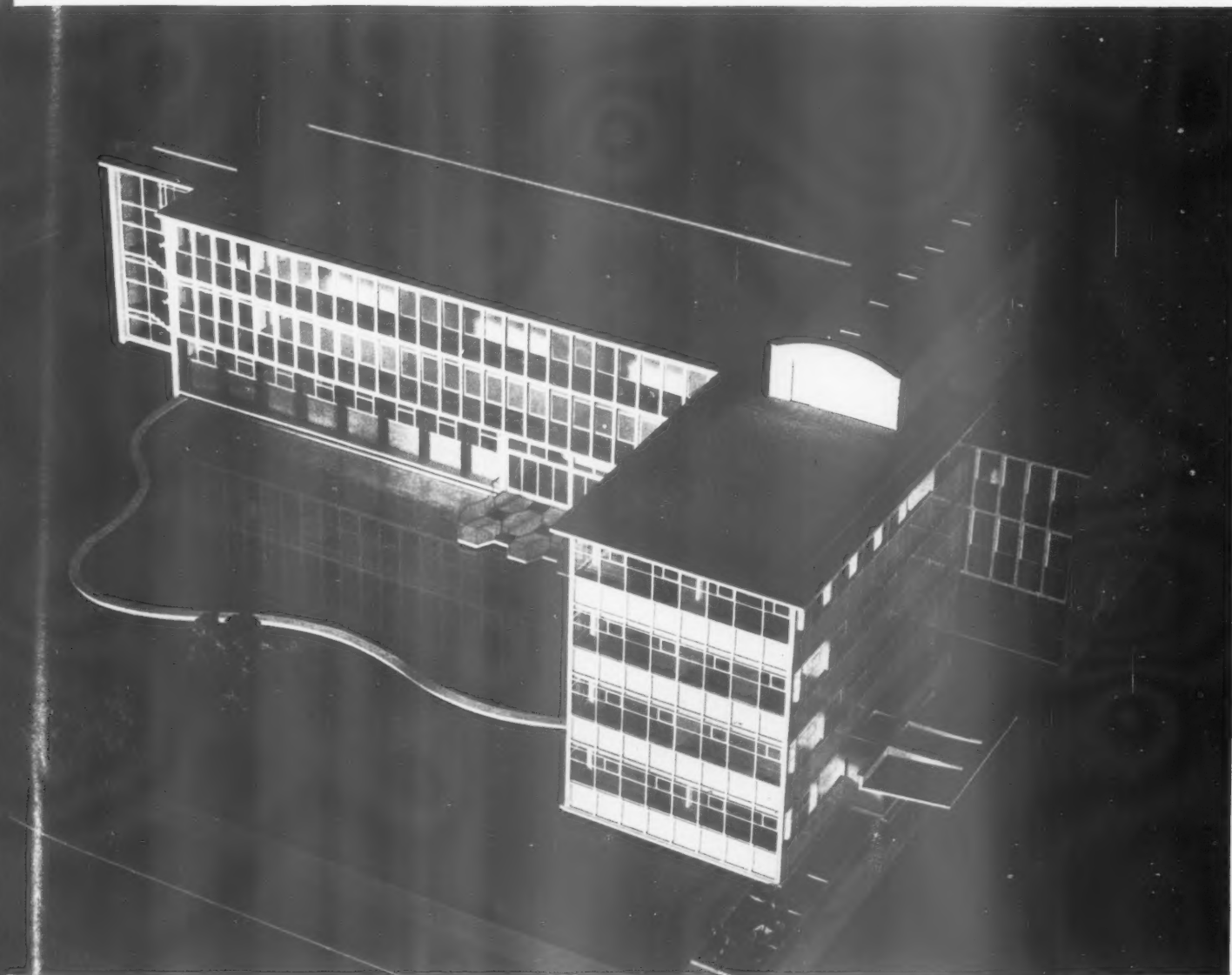
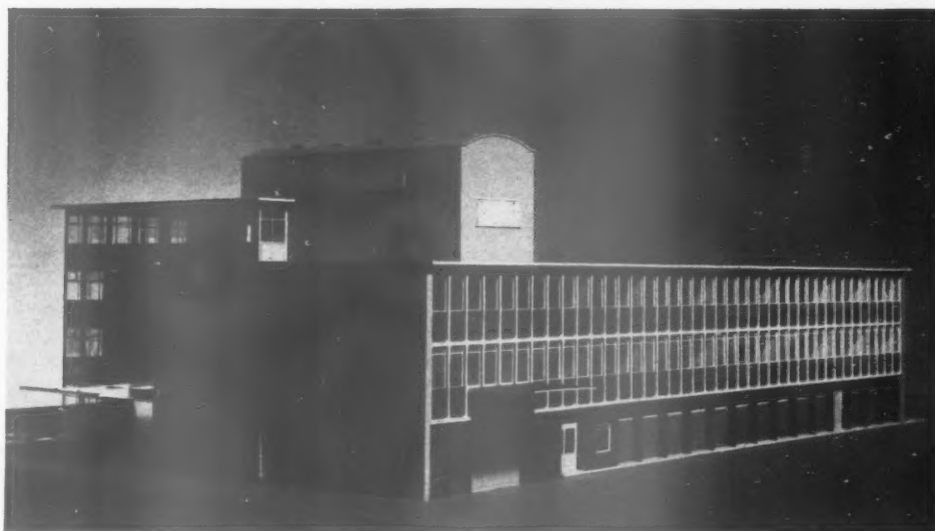
The site is at the junction of Great Cambridge Road and Southbury Road, and although self-contained the laboratories are planned in relation to the Ferguson Radio Corporation's works nearby. The laboratory working space is on the first and second floors. A central duct suspended below the ceiling contains ventilation trunking,

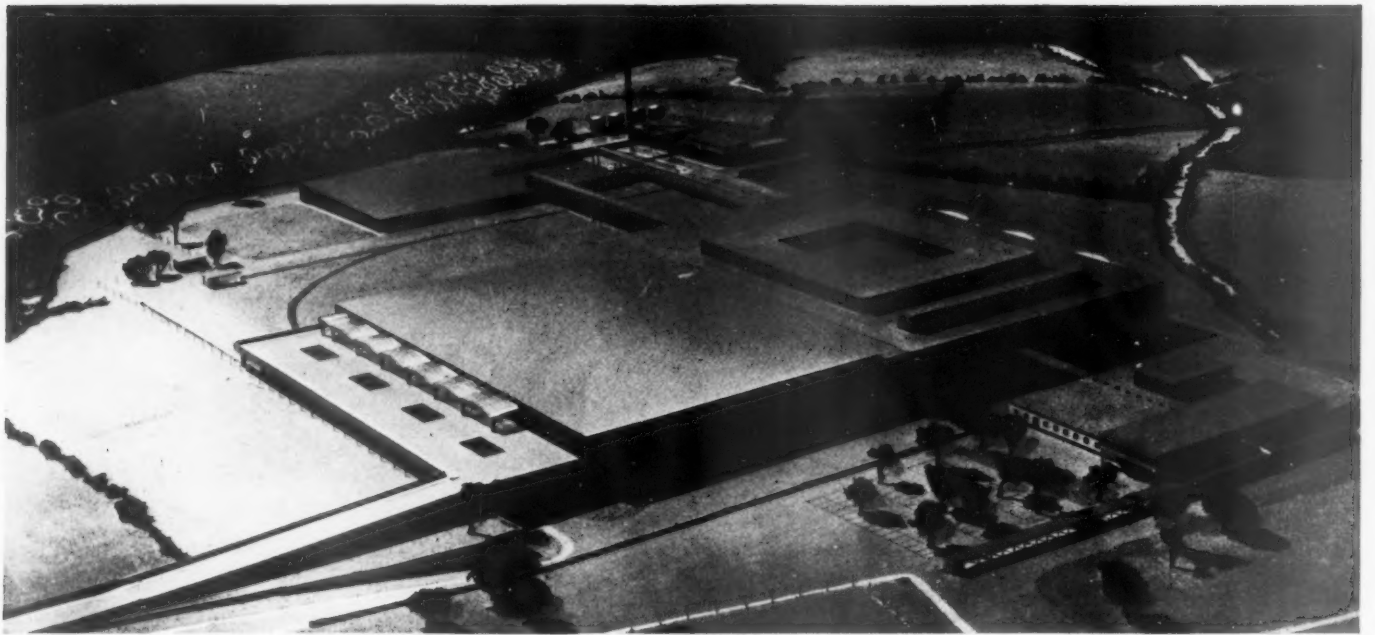
[continued on page 57]



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Television research laboratories at Enfield. Right: the laboratory block with the four-storey office block behind. Below, the two blocks, showing the pool between them, which will feed a heat-pump and contain fountains used to cool the refrigeration plant.



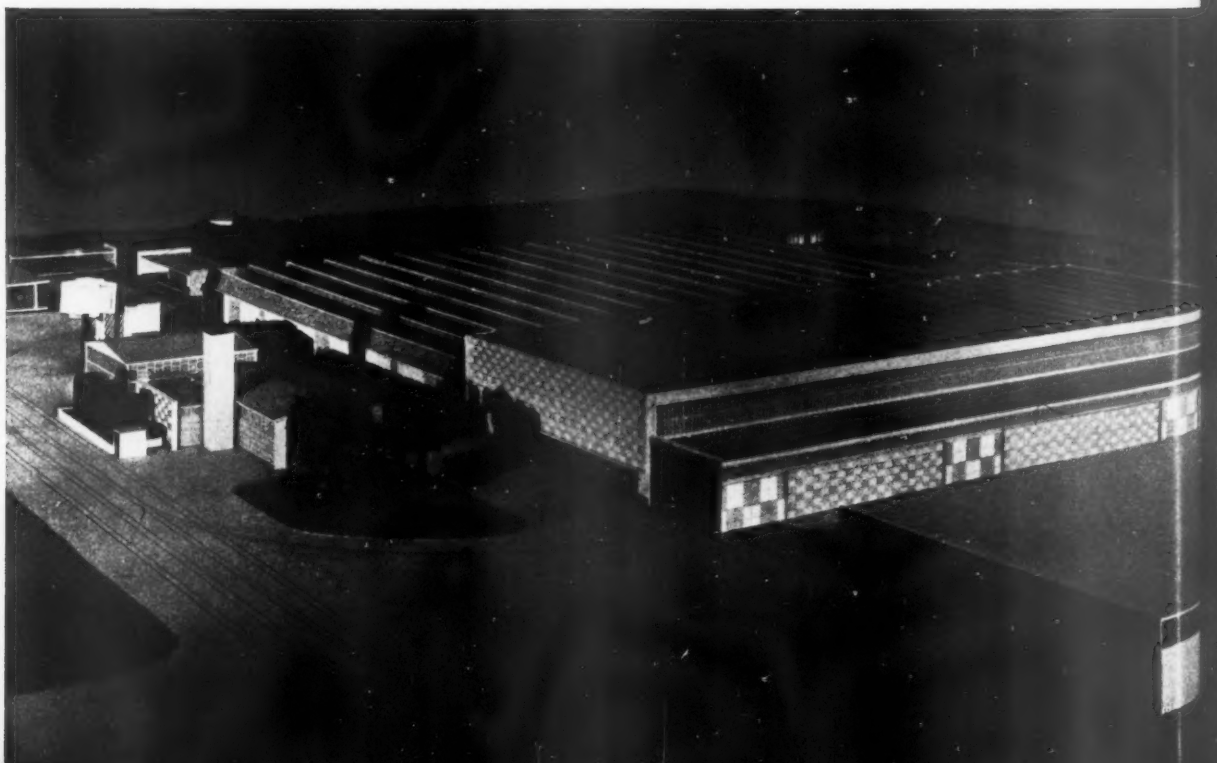


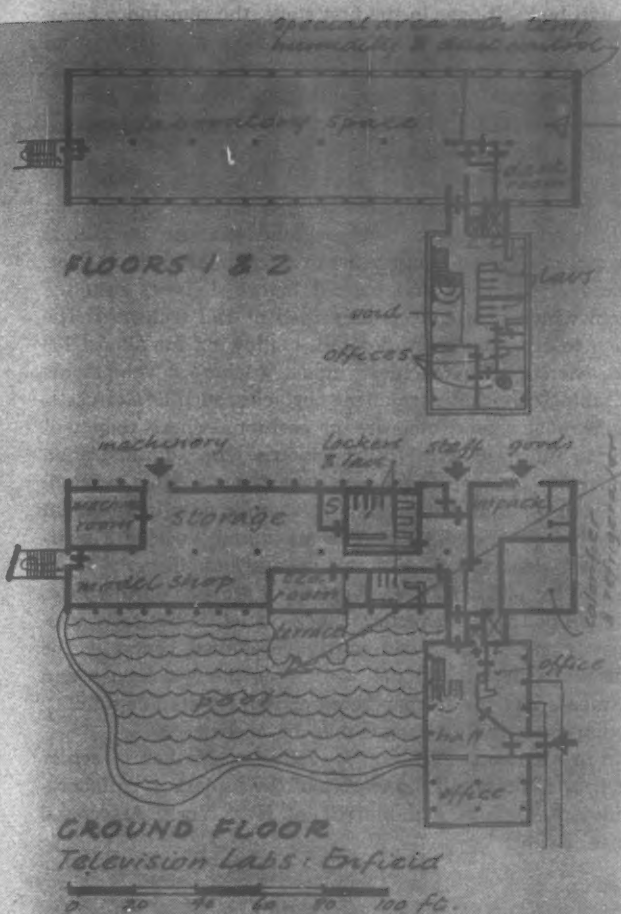
Above and right: Heinz factory at Wigan. On the left above is the ramp by means of which raw materials are fed into the high-level production area. On the right is the administration block linked by a bridge to the production and warehouse block beyond.

5. INDUSTRIAL BUILDINGS



Below: pressed steel factory at Swindon by Bertram Carter (see pages 58-59).





continued from page 54

heating and lighting runs. Main services are carried in a horizontal duct below window sill level, and contain electric power cables, town gas, water, compressed air, vacuum, and sink waste pipes. Outlets for these services are at 8-ft. intervals. Demountable partitions separate the rooms, except for a permanent darkroom and the special area on the first floor, which are sealed off from the remainder of the laboratory and have their separate air-conditioning plant. The ground floor of the laboratory block contains a workshop and machine rooms, main heating plant, goods unloading, storage space, staff lavatories and a tea room and small kitchen. The four-storey office block, at right-angles to the laboratory block, has permanent partitions, although the third-floor office space has been left open for the time being. Ventilation plant, lift machinery and tanks are on the third and fourth floors.

A large pool is laid out in the angle formed by the two blocks of the building. This provides a mirror of the building by day, and by night the building will be floodlit from underneath the water. Fountains in the pool are used to cool the refrigeration plant for the air-conditioning installation. The air-conditioning plant is designed for conversion into a heat-pump in spring and autumn, and extracts low-grade heat from the water in the pool. It is believed to be the first heat-pump to be installed by a commercial organization in this country. A permanent travelling cradle track is hung below the eaves of the building to facilitate the cleaning of glass and the regular washing of the aluminium windows and curtain walling components.

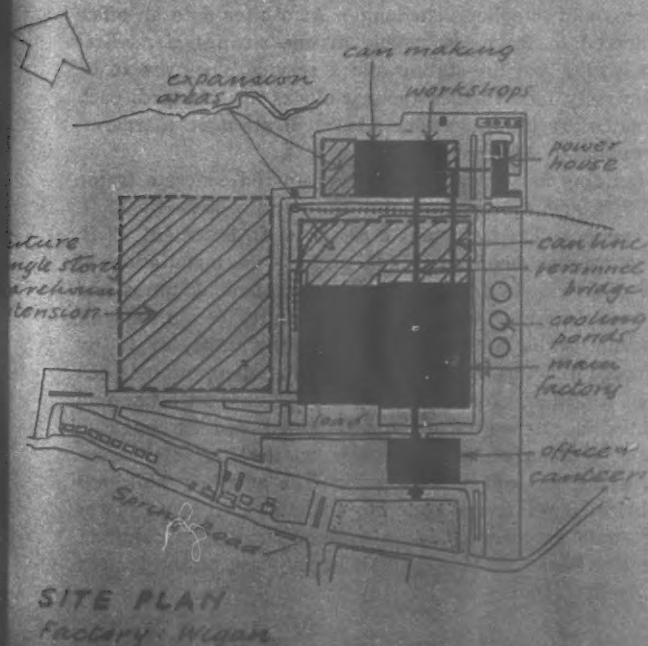
The structure is of in-situ reinforced concrete with 12 in. by 6 in. thick external columns at 8 ft. centres, supporting hollow-pot floors. The office block floors have no beams projecting below the slab, and have internal columns of 15 in. by 9 in. on the ground floor, reducing to 12 in. by 6 in. above. The office block entrance canopy, 24 ft. by 14 ft., is cantilevered from the first-floor slab. The laboratory block has one line of internal columns at 20-ft. centres, with an 18-in. deep spine beam spanning between them. Upright beams occur only where the external column spacing is increased to 12 ft. Dummy columns are introduced between structural columns on the first and second floors to maintain the 4 ft. internal planning grid inside the laboratories. The floors of the plant and machine rooms on the ground floor are totally independent of the main structure. The end walls of the laboratory block are 18-in. solid brickwork, and the north wall is pierced by a free-standing reinforced concrete stair. The office block and north stair have curtain walling on a 4-ft. grid with coloured glass panels below cills. The laboratory block upper-floor columns are faced in reconstructed Portland stone, with precast concrete slab panels between, faced with exposed Genoa marble aggregate. Double windows are provided to the laboratories. External windows are of aluminium and are permanently fixed. Inner windows are steel and only open for cleaning. Ground floor external walls to the laboratory block are placed behind the columns and are of brick, rendered.

Work began in April, 1955. Partner in charge: Alan Ballantyne. Quantity surveyors: H. J. Venning and Partners. Consulting engineers: Ove Arup and Partners. Heating consultant: J. C. Knight.

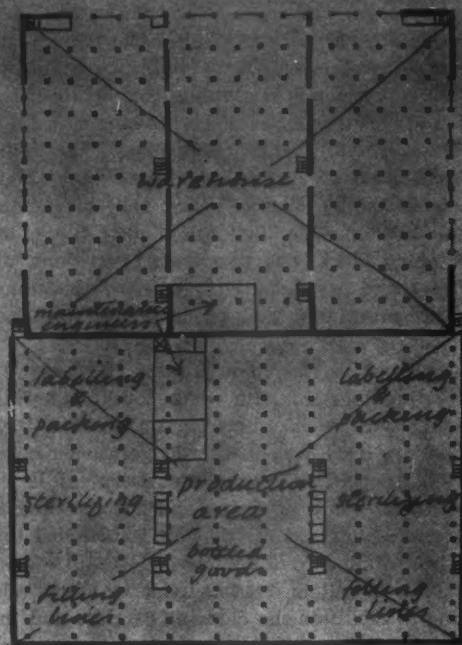
FACTORY: WIGAN

J. Douglass Mathews and Partners

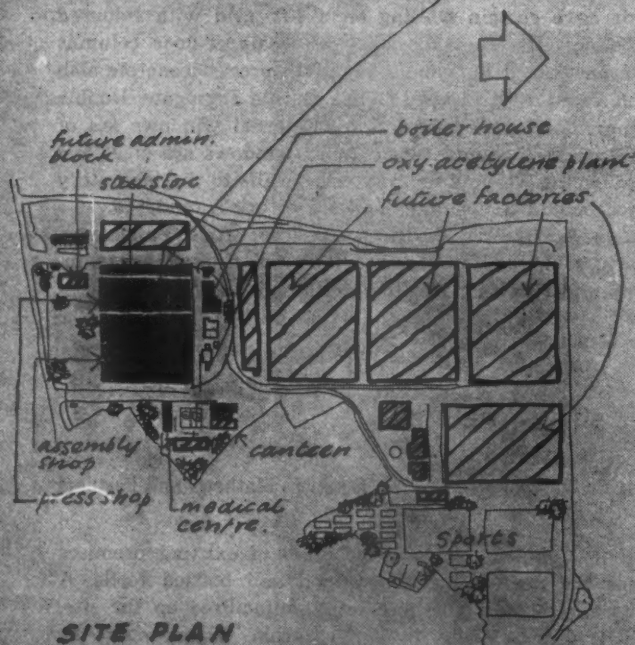
For H. J. Heinz Company, to take the place of existing premises near Wigan for the manufacture of canned and bottled foods. A large proportion of the cans will also be manufactured on the site, which is at Kitt Green, about two miles from Wigan, near the Wigan-Southport Railway, and totals approximately 150 acres. About



5. INDUSTRIAL BUILDINGS



LOWER PRODUCTION FLOOR
Factory: Wigan



SITE PLAN
Factory: Swindon

a third of this will be built over in the first stage, the remainder being used for sports field and agriculture. The site falls gradually in an easterly direction and commands a fine view over open country. The factory will accommodate a total day and night population of well over 2,000, and has a separate administration block, containing a large canteen and welfare departments.

It consists of a raw materials store, planned on the upper level and approached by road ramps, feeding directly into an upper production area from which the prepared foods descend via the mezzanine (which houses manufacturing equipment) to a lower production floor, where it is canned, sterilized and packed before delivery into the warehouse, from which it is collected by road or rail transport. The space is planned to give maximum flexibility, allowing for almost 100 per cent future change of layout in an industry where developments are rapid, but taking care that permanent obstacles, such as staircases, ventilating ducts, cool rooms, etc., are in positions where they will be least likely to interfere with future layouts. The administration block is planned so that personnel can pass directly from ground-floor level by means of a bridge into the mezzanine floor of the main factory and, having circulated within the mezzanine floor to a staircase near to their department, rise up, or descend, directly to it. Lavatories, rest rooms and certain factory offices are also on this floor.

The construction of the main factory block, which is basically two-storeyed, is partly steel frame and partly reinforced concrete, the latter being used (with brick panel walls) for the warehouse and storage departments and the former being chosen for its adaptability in the production area where changes may be needed.

Work began in October, 1955. E. D. Jefferiss Mathews, senior partner in the firm, is personally in charge of the project in collaboration with Skidmore, Owings and Merrill, of New York. Associated partner: Michael Ryan.

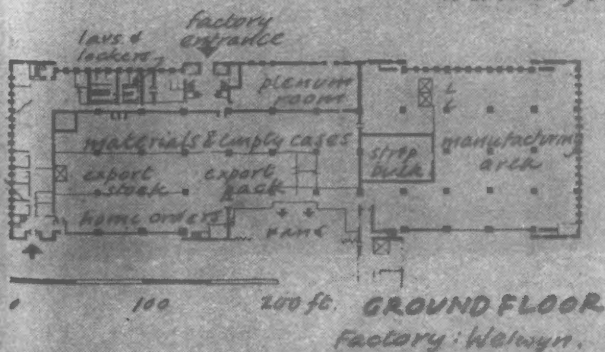
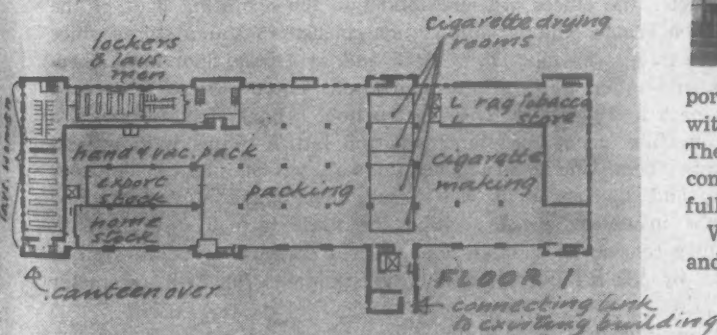
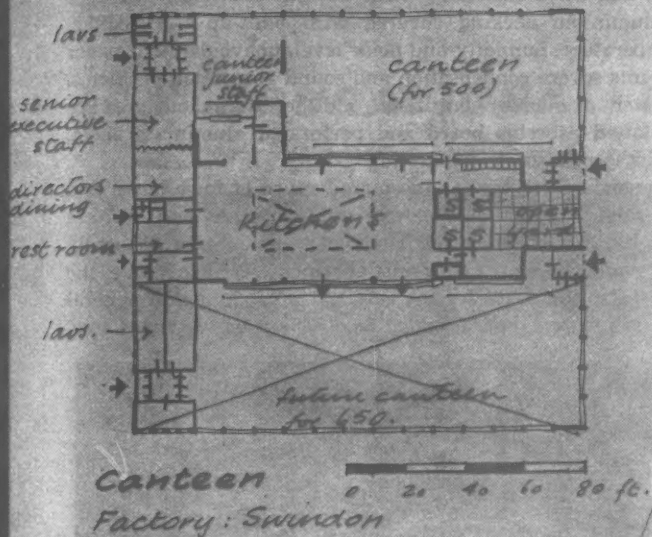
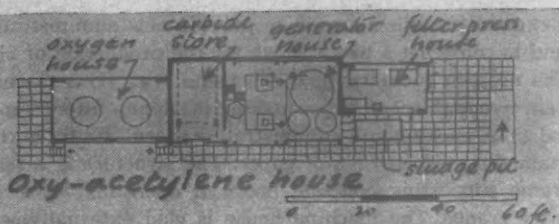
FACTORY: SWINDON

Bertram Carter

For the Pressed Steel Company (manufacturers of motor-car bodies, refrigerators and railway wagons), consisting of a factory building 650 ft. by 450 ft. (divided into three sections: a steel store, press and assembly shops and despatch platforms) and a number of separate ancillary buildings; namely, a boiler-house, a compressor-house, an oxy-acetylene plant house, an oil-tank farm, and a gatehouse (with watchman's rooms and telephone exchange). At a later date an office block (with canteen to serve 600 people at one sitting), a medical centre block, a garage and fire-station and a service block are to be added, and ultimately four further factory blocks are planned, each with the same ancillary buildings. The site, at Stratton St. Margaret, comprises approximately 135 acres of open land.

The factory building has a prefabricated reinforced concrete frame on a 25 ft. by 30 ft. grid for the assembly shop and a 60 ft. by 25 ft. grid for the press shop. The latter has a 60,000 sq. ft. basement, 12 ft. deep. The structure has been so designed that the installation of machinery and plant can begin as soon as foundations, columns and roofs are in place, leaving walling and windows to be finished off later. The external walls are of precast cladding units, 25 ft. by 3 ft. 6 in., reinforced to act as self-supporting beams, spanning between columns without continuous footings. They are surfaced with fine and coarse aggregates in alternate panels, subdivided and arranged to produce a diaper pattern of varying scales on the four elevations. There is a clerestory, top and north lighting. The ancillary buildings are also prefabricated reinforced concrete structures, in some places employing the same external cladding units vertically as columns.

Work on the site began in March, 1955. In the case of the factory



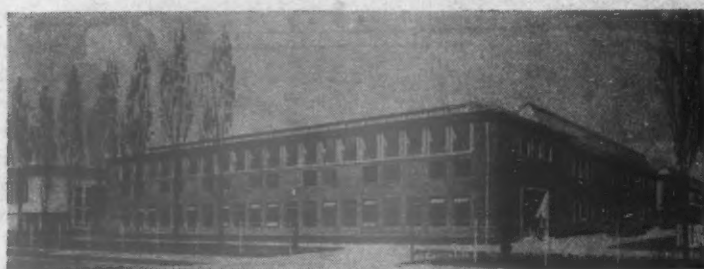
block only, the architect's role has been limited to that of consultant for the external treatment of a structure already decided upon, which was devised by Messrs. Holland & Hannen and Cubitts. Assistant architects: Kenneth Brown, Eric Drew, Thomas Hamilton and Roger Hammond. Consulting engineer for the boiler-house: H. G. Cousins. Consulting engineer for the walls and beams of the oxy-acetylene plant house and the gatehouse: R. A. Sefton Jenkins.

FACTORY: WELWYN GARDEN CITY

Louis de Soissons, Peacock, Hodges and Robertson

For the manufacture of cigarettes by the Ardath Tobacco Company. The site has an average fall of 2 ft. from west to east and adjoins the Company's existing building. A link between the new and old buildings is in a style in keeping with the new building, with the roadway continued through the link. The factory comprises 115,750 sq. ft. of floor area, of which 91,200 sq. ft. is production area and 24,550 sq. ft. administration and service area. The production area is on two floors, the first floor being of flat slab construction, and the administration and service area on three floors. It has been possible, in view of the high storey-heights required for production, to accommodate both sections within the same total height, thus forming a constant eaves line. The ground-floor area of the three-storey section will be used for offices, the first-floor area for male and female factory employees' cloakrooms and lavatories, and the third floor for a canteen and kitchen and staff messes.

The building is of reinforced concrete framed construction including northlight portal frames with external brick cladding. Purpose-made sand-lime bricks are used for the plinth courses with buff multi-coloured rustic facing bricks above. Cills and window surrounds are in reconstructed Portland stone. The panel areas over emergency doorways are rendered. The penthouse section of the three-storey



portion is formed by a series of aluminium portal frames, roofed with synthetic board covered with green mineral-surfaced felt. The production area only has a plenum ventilation and semi-air-conditioning system, and the whole of the building is protected by a full sprinkler installation.

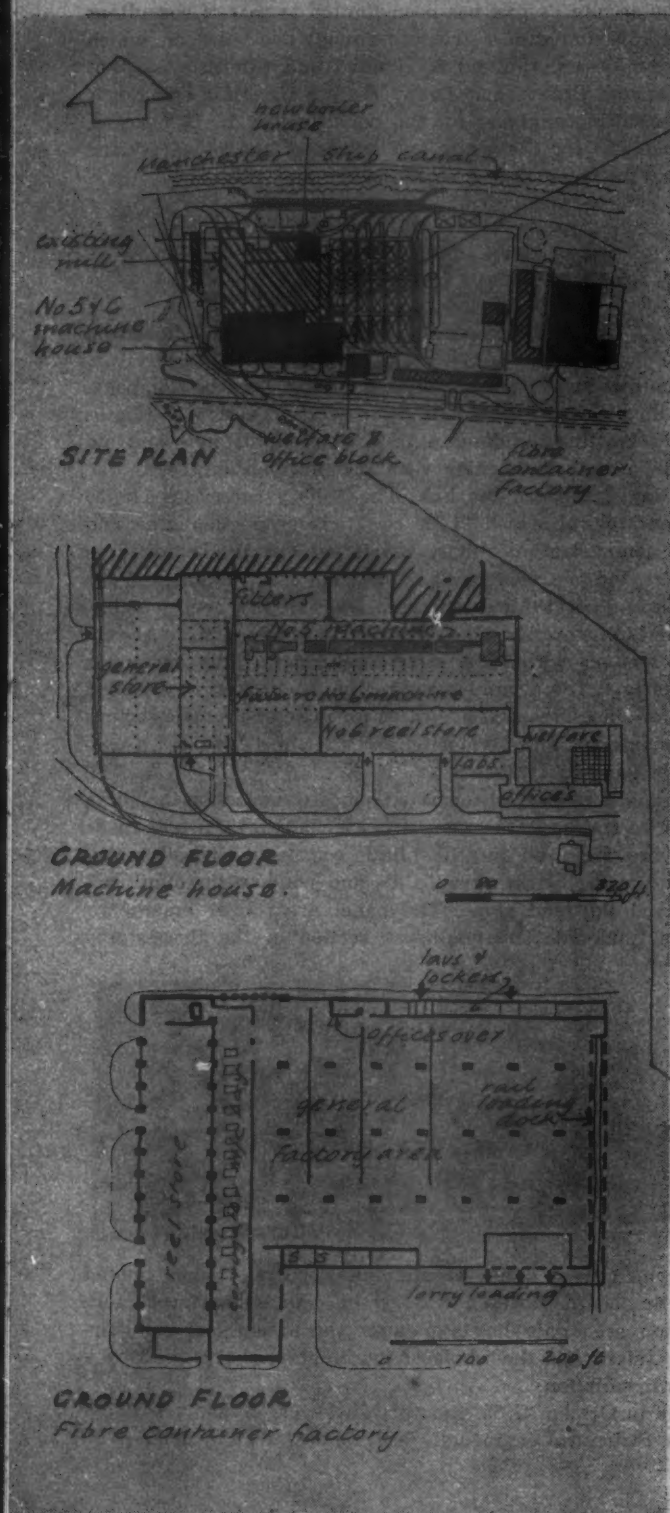
Work began in October, 1955. Quantity surveyor: Sydney A. Paine and Partners. Structural engineers: R. T. James and Partners.

FACTORY: ELLESMERE PORT, CHESHIRE

Farmer and Dark

One of two major development schemes for the Bowater Paper Corporation at the Corporation's Thames and Mersey Mills. The buildings are mainly industrial buildings for the manufacture of paper and associated products, together with administrative and laboratory blocks. The site is on flat land adjacent to the existing Mersey Mill, which is situated on the Manchester Ship Canal. The

5. INDUSTRIAL BUILDINGS



purpose is to expand the existing mill, to provide new administrative offices, etc., and to construct a new factory for the production of fibre containers. The projects included in this scheme are: (1) a machine house to contain two high-speed paper-making machines, fitters' repair shop, electrical shop, packing and administrative space, and three reel-stores to contain the finished rolls of paper. The structure is a semi-rigid steel frame supporting concrete floors at operating level and overhead gantry cranes. The machine house is clad externally with plastic sheet, and lined internally with acoustic material. The roof is a light aluminium decking covered with built-up felt roofing. The high temperature, humidity and noise level, unavoidable in paper making, presents severe condensation and sound absorption problems. There is a system of plenum ventilation, and the internal surfaces are lined with slotted asbestos board and perforated aluminium sheet, both backed by loose insulating material.

(2) An independent factory for the manufacture of fibre boxes and drums. The factory contains its own administrative and welfare sections, and its own boiler-house. The factory floor area is loosely divided to provide reel stores (the rolls of paper are, in this case, the raw material), also the space for the corrugator machine, the general factory area, and storage and despatch bays. The construction is steel



framing, which in the main is clad with aluminium sheet lined with insulation board. A plinth round the building is of precast concrete slabs. The south wall had to be constructed of brickwork with large metal windows, since it was required to match an adjoining building. The factory roof is an aluminium deck.

(3) An office and welfare block adjoining the new machine house, and incorporating the new main mill entrance, clocking-in arrangements, etc.; the offices are also linked to the operating floor of the mill by a bridge. The accommodation consists of a four-storey office block, a two-storey laboratory block and, at ground-floor level, lavatories and other welfare accommodation. There is also a covered cycle park and car port. The construction is light steel frame on a 40-in. module, using box stanchions and lattice beams with precast concrete floors. The external curtain wall has stainless steel cover strips, and the spandrels below cill level have stove-enamelled asbestos insulating panels behind the glass face. The cycle park structure consists of tubular steel space frames covering an area of 100 ft. by 130 ft., supported only at six points on 1½-in. diameter steel pins.

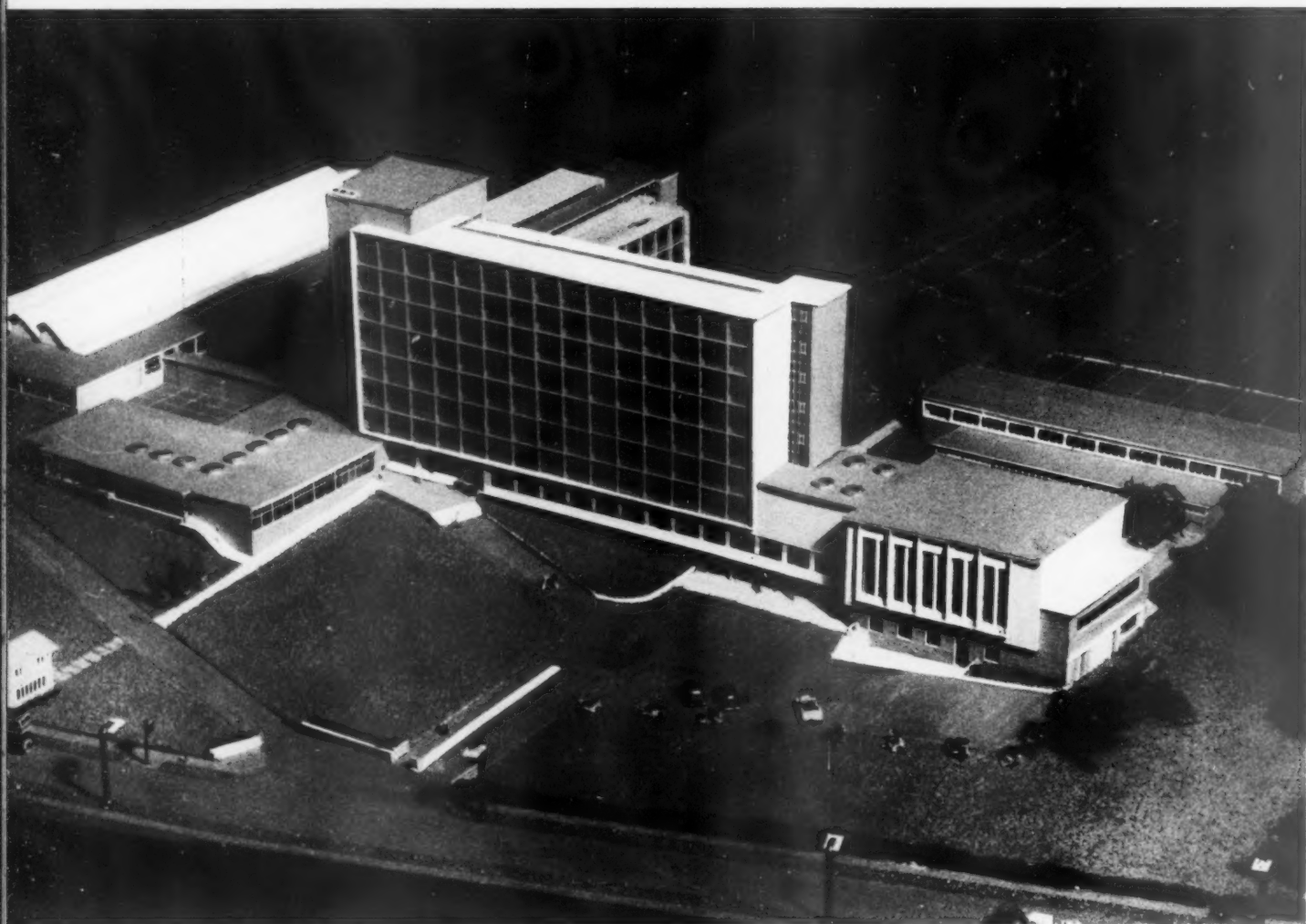
Partner in charge: J. T. Pinion.

6 **EDUCATIONAL BUILDINGS**

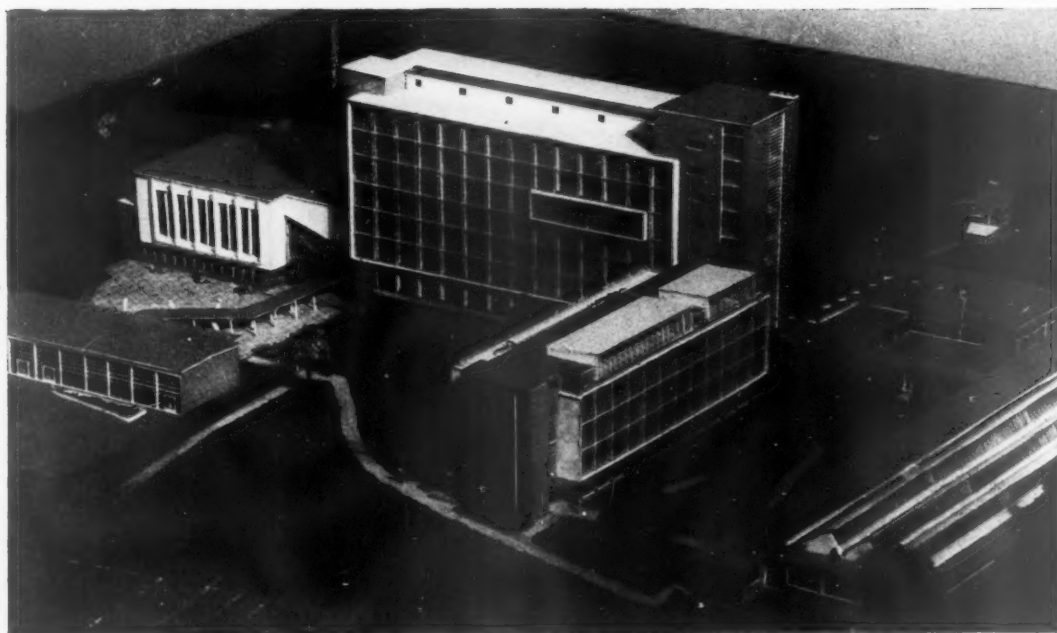


Layout and landscaping plan for Nottingham University, by G. A. Jellicoe and Partners (see pages 67-68).

6. EDUCATIONAL BUILDINGS

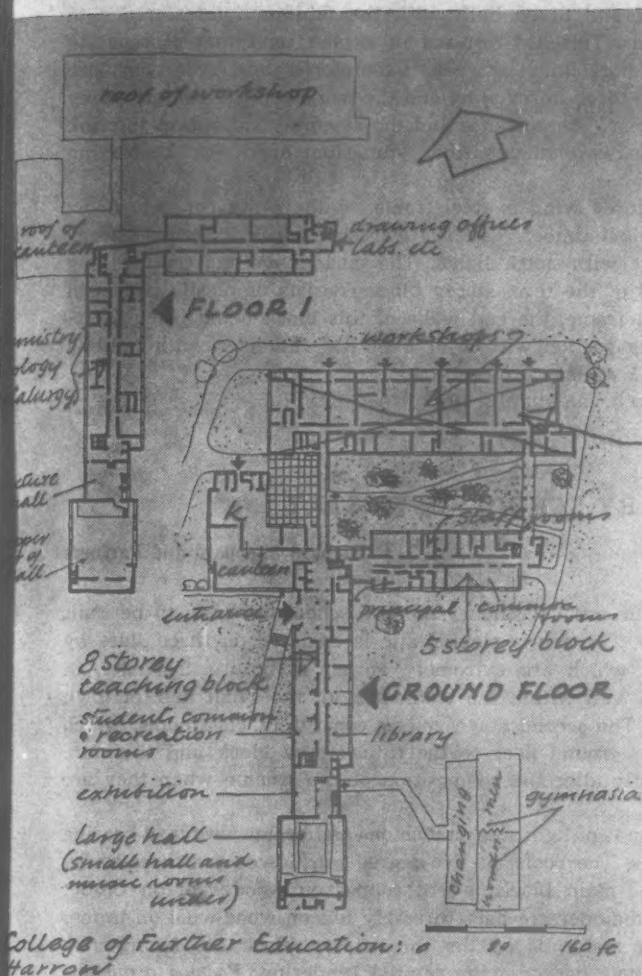


Harrow college of further education. The eight-storey teaching block in the centre and the single-storey workshop block (top left, above) are the main portions already under construction.



COLLEGE OF FURTHER EDUCATION: HARROW

C. G. Stillman (Middlesex County Architect)



To replace the existing Harrow Technical College and School of Art, which is too small and unsuitable for extension. The site, of 26 acres at the north-west corner of Northwick Park, just outside the Borough of Harrow, is bounded on the north by main line and Metropolitan railways and slopes gradually southwards to the site of the proposed new Charing Cross Hospital. On the east is public open space. To the north and west are trees screening the site from the railway. The College has been planned for over 2,300 students and will provide full- and part-time day and evening classes in engineering, pure and applied science, photography and cinematography, commerce, domestic subjects and crafts; also an art department. Eventually physical training facilities will also be available. The current building contract provides the workshop block, the main eight-storey teaching block and the canteen, a little over half of the ultimate accommodation. A second multi-storey block, the assembly-hall block and gymnasium will follow at some future date.

The single-storey workshop block (to the north) is of reinforced concrete north-light barrel-vault construction with reinforced concrete framed ancillaries. The rest of the college is also of in-situ reinforced concrete 'egg-crate' frame construction. Cladding of the frame is mainly brick but much of the fenestration is by glazing direct into precast concrete frames, opening or vent lights only being in steel or wood. Vertical and horizontal ducts provide accessible service ways via which the laboratories, workshops and specialist rooms can be fed, or waste and fumes disposed of. In addition to normal central heating and water supplies, there are special services of distilled water, steam, gas, compressed air, vacuum and electricity in several voltages, AC and DC. There are also ventilation, fume extract and exhaust systems for plant, equipment and appliances.

Coat recesses are provided in each teaching room, in the spaces available between the vertical ducts in corridor walls. To facilitate servicing and possible later adaptation of services, all laboratory floors are hollow and removable in panels and all laboratory fittings easily moved on castors, revealing the elaborate service rails for maintenance. The chemical drainage system is totally enclosed, using a combination of polythene, pyrex glass and chemical stoneware pipe-lines which make open channels, waste receivers, etc., obsolete. Dilution of effluent to a degree acceptable for discharge into sewers is by automatic flushing of one external chamber for the whole system. To avoid the complication caused by radiators under windows, which would be rendered inaccessible by the numerous service runs, central heating in laboratories and workshops is by forced-air convector units placed in corridor walls and by high-level unit heaters and/or radiant panels. Artificial lighting is mainly fluorescent.

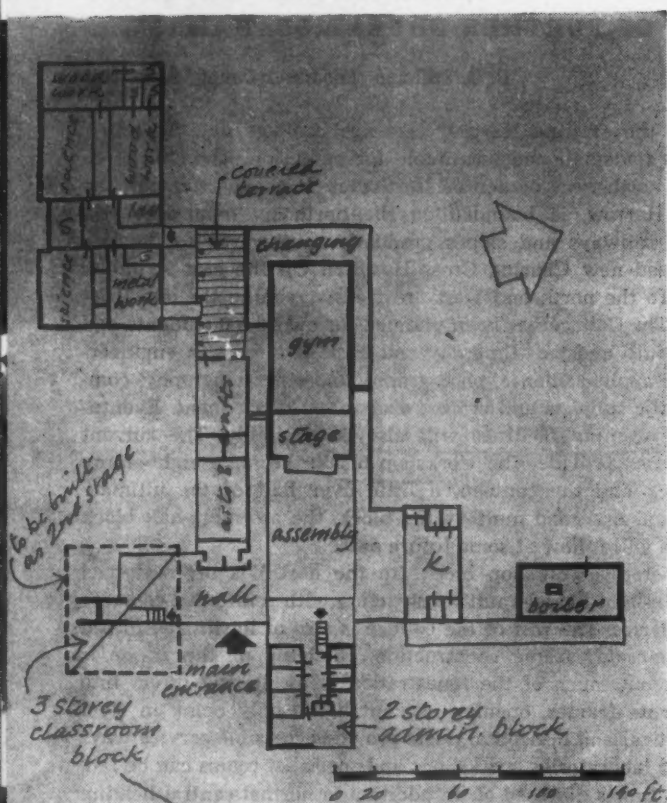
Building started in April, 1954. The county architect was assisted by G. F. Holden (group architect for further education), A. Hewanicki and J. S. Cousins.

TECHNICAL COLLEGE: REDCAR, YORKS

Gollins, Melvin, Ward and Partners

To be built in three stages. The first comprises the majority of the departments of building science and engineering, the second comprises the balance of these departments and all the commercial departments, where students will be trained in typewriting, book-keeping and kindred trades for the growing industries of Tees-side. The third stage comprises the department of catering and women's work. The site is near the centre of Redcar (North Riding), in a mainly residential area. It was essential for each stage to be com-

SITE PLAN
Technical College: Redcar, Yorks.



GROUND FLOOR
Secondary School: Oswestry

plete in itself and to be built with the minimum interference to earlier portions. This has resulted in a plan consisting of separate blocks, with short links between. Laboratories and classrooms are planned in the three-storey wing and the workshops in a single-storey block to the rear. The entrance and the assembly halls form the link between these two elements; the gymnasium overlooks the playing fields.

The three-storey wing is steel framed with in-situ concrete floors and a lightweight timber roof. The workshop block is a single-storey steel structure with north lights. The curtain walling on the long window walls of the three-storey block consists of plastic panels in an aluminium frame, the end walls of this block being brick faced. The one-storey portion will be of a similar character, with infilling walls and flank walls in brickwork.

Construction began in June, 1955.

SECONDARY SCHOOL: OSWESTRY

Richard Sheppard and Partners

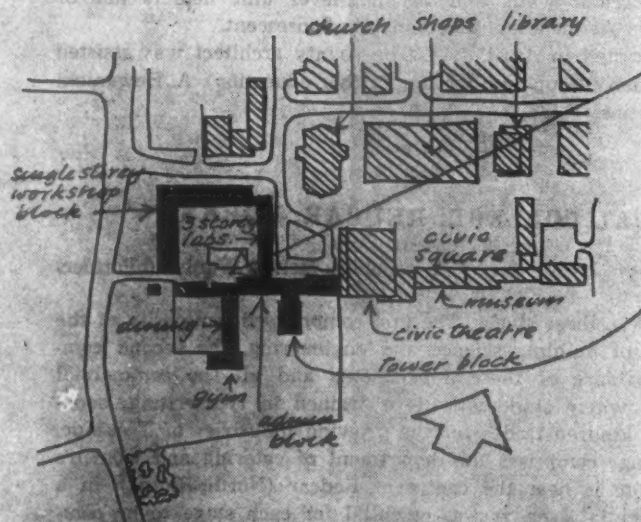
A three-form entry secondary modern school for boys, to be built in two stages. The gently sloping site is enclosed on three sides by mature trees which are extremely varied in nature. The site, in Pool Road, is well within the boundaries of the small market town of Oswestry. The second stage chiefly consists of classrooms, which will form the ground floor to the (three-storey block) and therefore will not greatly alter the composition of the scheme when they are added.

Construction is of light steel stanchions and beams with load-bearing internal walls. The roofs, of five-degree pitch over the three-storey block and the main block, are of copper on wood-wool on timber joists. The remainder are flat: three-ply felt on wood-wool on timber joists. Facing materials on the three-storey block are facing-brick and glass panels backed with painted rendering. Fascias are slate. Facing materials on the art and craft rooms are slate panels in metal frames beneath windows, and elsewhere are facing brickwork or glass. Fascias are softwood painted.

Work began last month. The school was designed in collaboration with C. H. Simmons, County Architect of Salop. Architect in charge: Kenneth Strowlger.

COLLEGE OF FURTHER EDUCATION: HARLOW

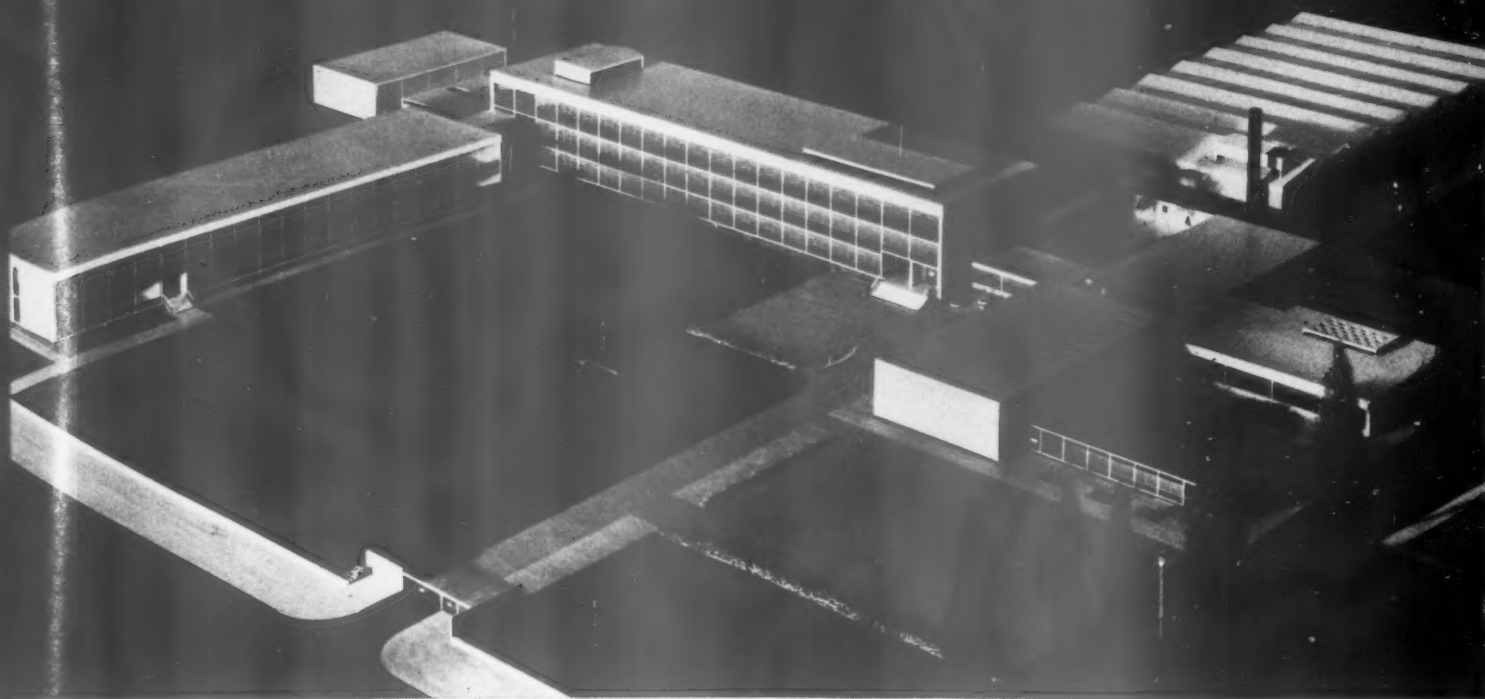
Frederick Gibberd



SITE PLAN
College of Further Education: Harlow

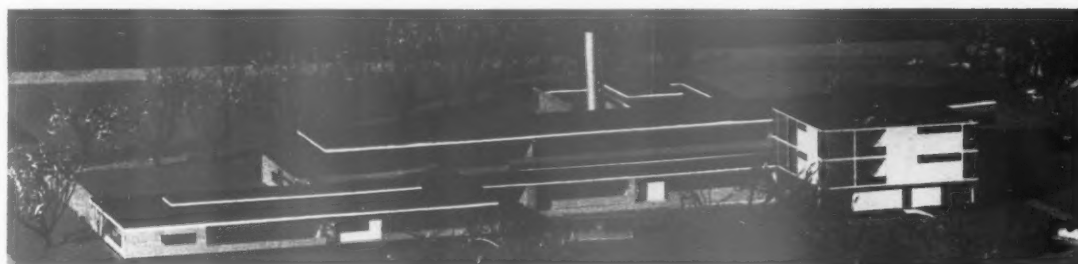
The site is at the south-west corner of the town centre, occupying an important position in the new town. The buildings will terminate the group of civic buildings overlooking the landscaped garden on the south, and will form an important focus from the radial roads approaching the town centre from the south-east and south-west. There are three main blocks: workshop (one floor), laboratories (three floors) and general-purpose (seven floors), linked by a single-floor block containing administration, common services, etc. The workshop block has an 'L' plan and, with the three-storey laboratory block and part of the administration block, forms an enclosed courtyard providing a space for servicing and for an outdoor workshop shut out of the general views. The laboratory block is placed adjacent to the workshop block, in which position it helps to form the civic square. The administration block runs from east to west across the site, linking the various elements together, with its main entrance on the square. The hall is also on the square at the east end of the administration block, where it shares the main entrance hall. The kitchen and boiler-

[continued on page 67]

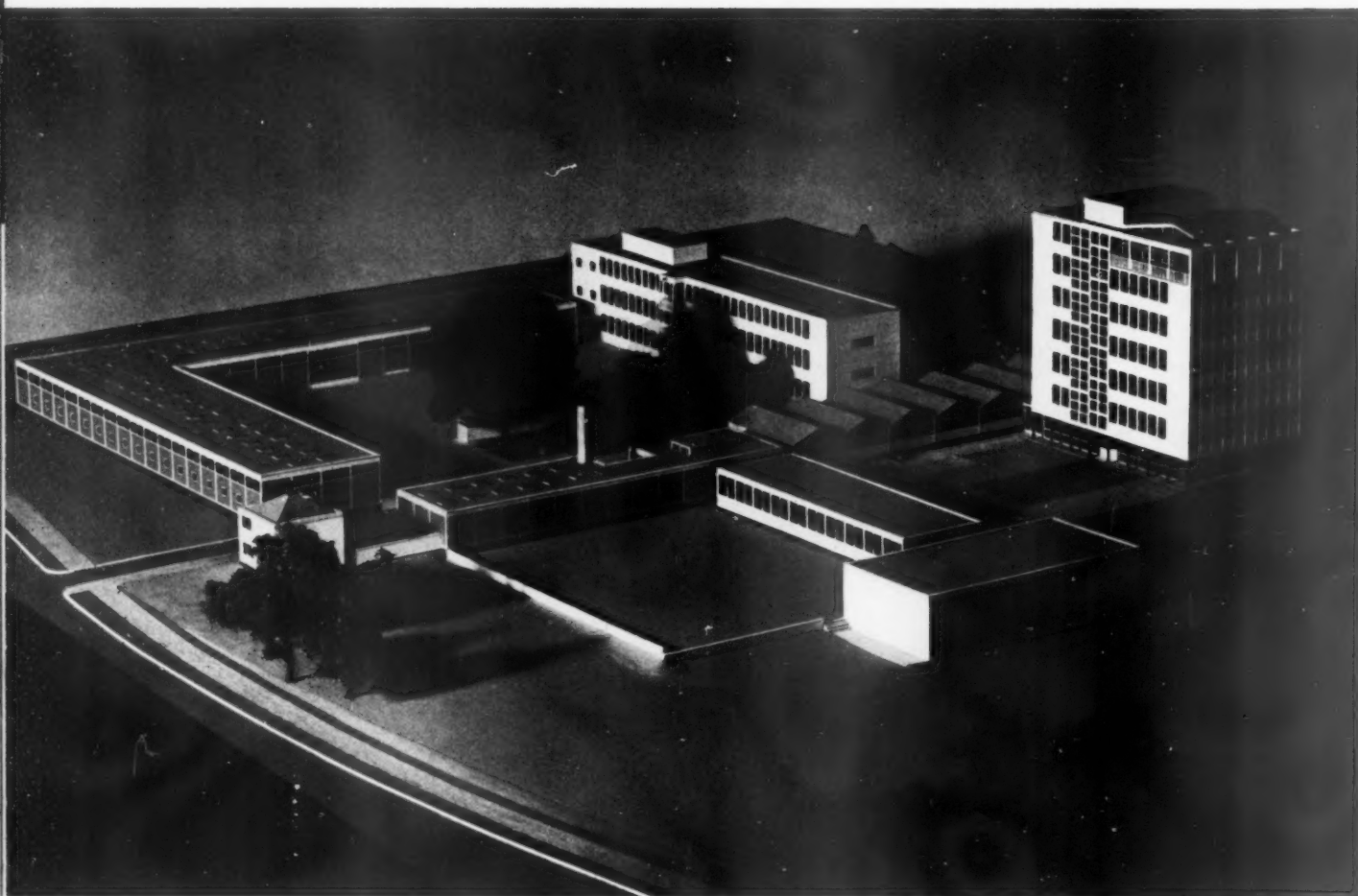
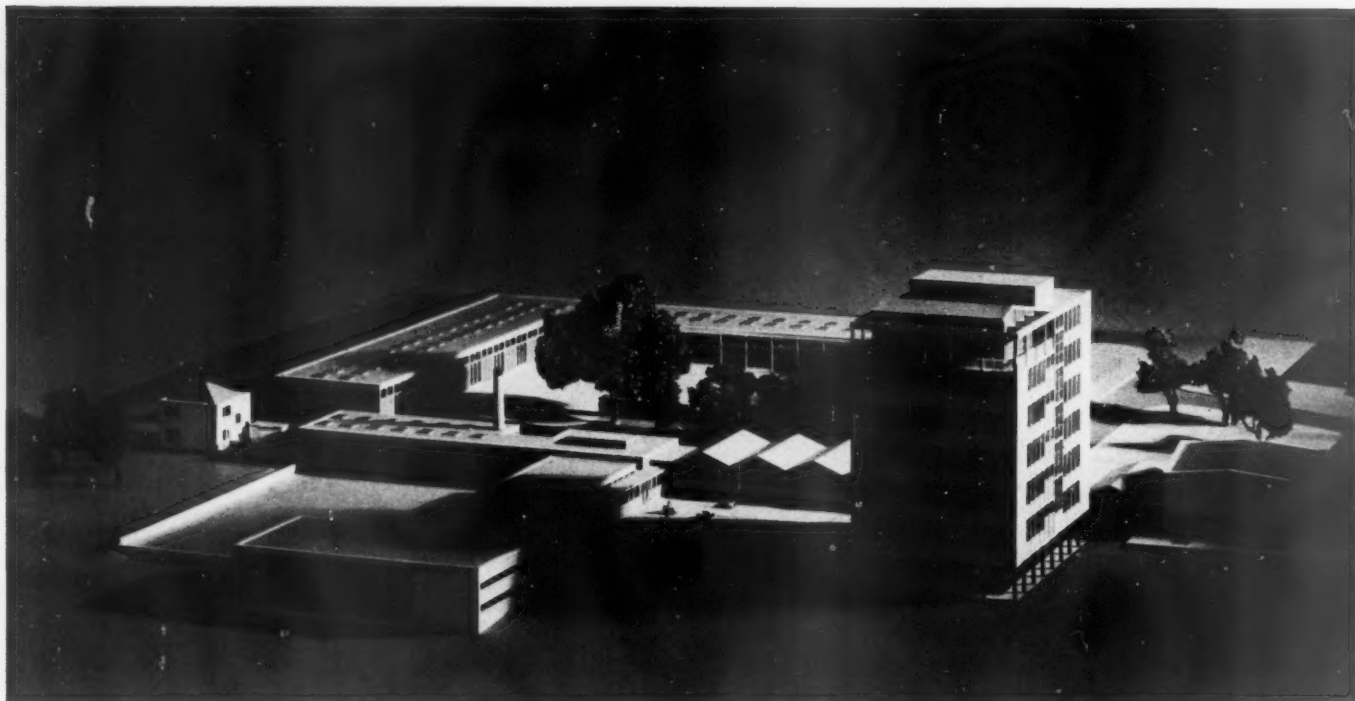


Above: technical college at Redcar, Yorks. (architects: Gollins, Melvin, Ward and Partners), from the south-east.

Right: secondary school at Oswestry, Salop. Top, general view; bottom, close-up showing three-storey class-room block.



6. EDUCATIONAL BUILDINGS



College of further education in the town centre at Harlow new town (architect: Frederick Gibberd). The high block is for general teaching purposes; the three-storey block contains laboratories and the lower buildings workshops, offices, etc.

continued from page 64]

house are at the end of the administration block adjacent to the service road and court. The dining block extends to the south and beyond it, still further to the south, are the students' common rooms and the gymnasium. This extension helps to give a sense of enclosure to the landscaped garden. The college has been designed to be built in stages (see site plans), which have been planned so that the first stage will give the appearance of a completed scheme.

The buildings are frame structures with infilling walls of brick, stone slab, or glass. The frame is reinforced concrete except in the case of the one-storey administration block, which has a timber frame. Floors and roofs are of precast reinforced concrete.

Work will begin on the site early this year. The college was designed in collaboration with Harold Conolly, Essex County Architect. Associate architect: J. B. Forrest. Quantity surveyor: Oswald Parratt. Structural engineer: F. J. Samuely. Services engineers: Roger Preston and Partners.

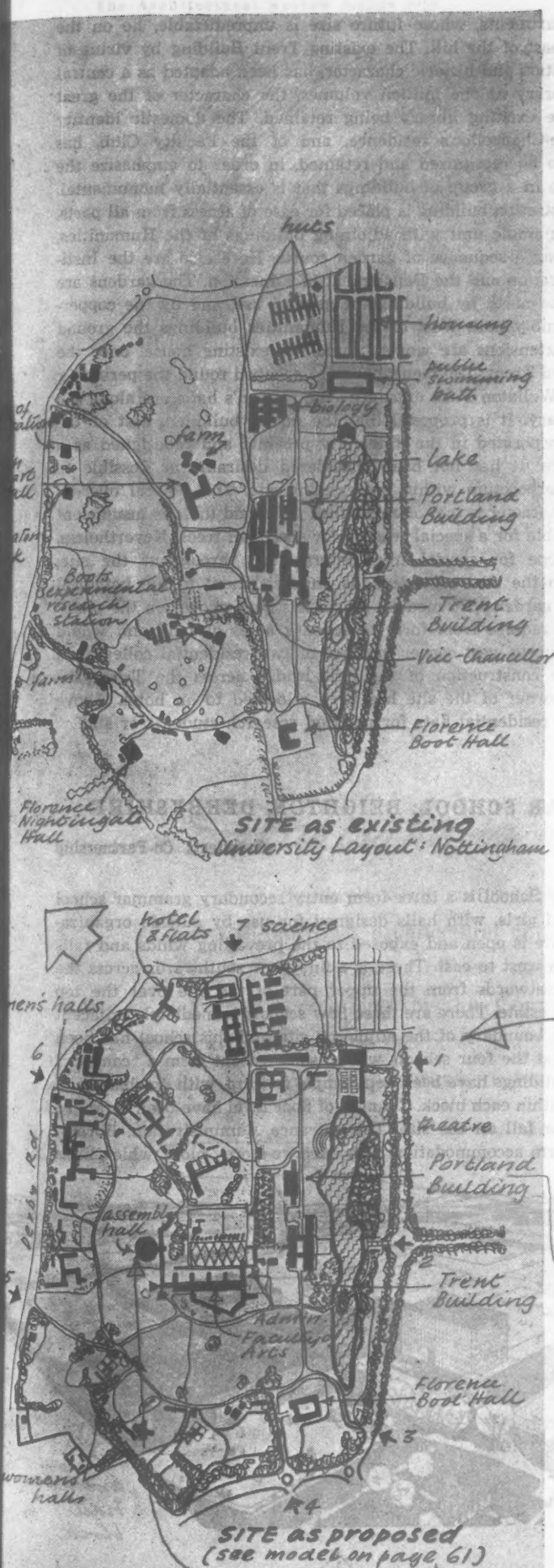
UNIVERSITY LAYOUT: NOTTINGHAM

G. A. Jellicoe and Partners

A plan for co-ordinating existing and future buildings of the University to form a coherent landscaped whole, based on the plan prepared by Sir Percy Thomas in 1948. The present University site has an area of 258 acres. This plan assumes the acquisition of adjoining land to bring it to 436 acres. To the north lie the 700 acres of permanent parkland of Wollaton Hall, now a city museum. The general land formation gives the impression of a peninsula of high land extending into the level lowlands of the Trent Valley from the undulating and well-treed plateau that partly forms Wollaton Park. Part of the site is upon coal measures, and because of subsidence any building programme must be related to the programme of mining. It is peculiarly rich in trees planted over a period of 200 years and more. The Vice-Chancellor's residence, Highfields, was built in 1760, and created at that time the essentially English park of tall trees, grassland and water, the identity of which survives. The main buildings date from 1928 onwards, but much building for expediency took place during and immediately after the war. The plan requires the removal of such temporary buildings; also of the present engineering buildings.

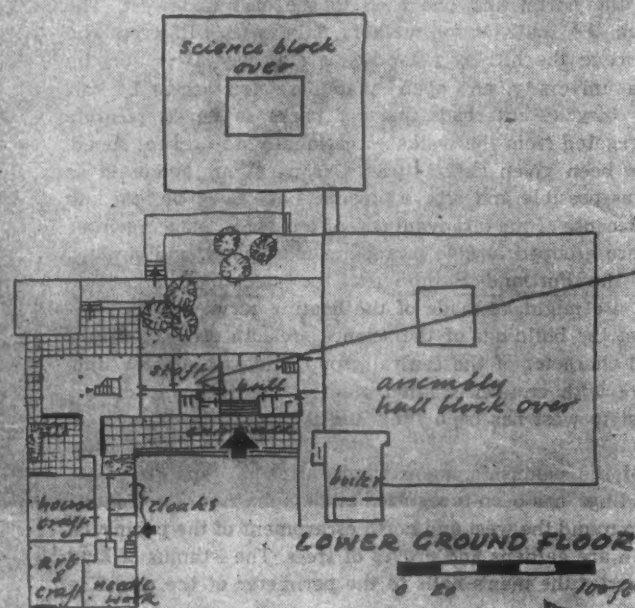
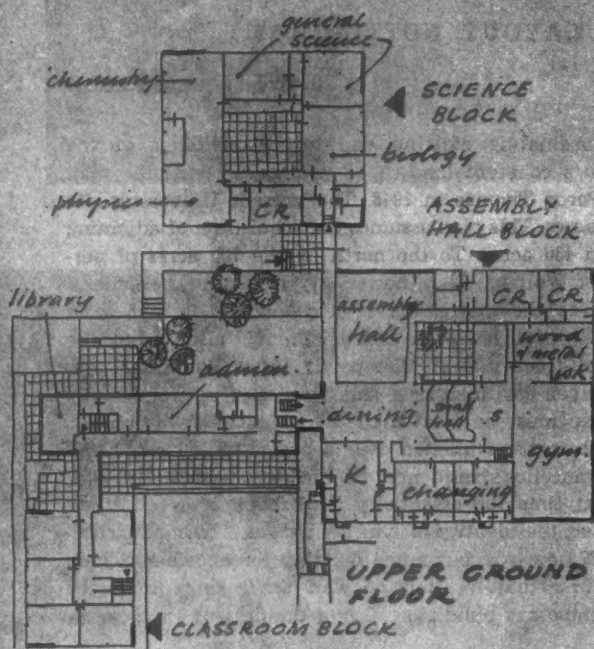
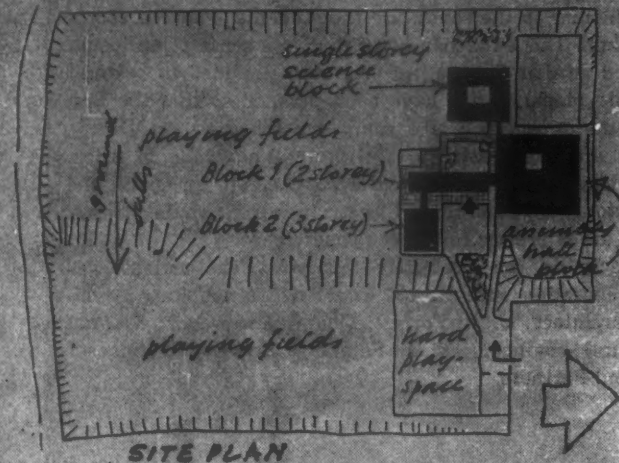
In this plan the University is entered by seven gates; three to the south, two to the north, and one each to the east and west. The axial gate from the south is for walkers only, who will cross the bridges and ascend the hill by a landscape stairway. It is, for the first time in a university, an 'open' plan based on access by car, motor-cycle or bicycle, but roads and car parks so far as possible have been segregated from the walks; occasionally, to prevent speed, the roads have been given sharp turns. Car parks are rendered as inconspicuous as possible and where possible have been designed to muffle sound. Because of the disadvantages of an 'open' plan in winter the buildings are grouped to give protection from wind, and covered ways connect the Portland Building to the assembly hall. It is suggested that use might be made of the heating service ducts similarly to connect the buildings of the science area. In order to retain the precinctual character of the central group, and at the same time not to interfere with cross-circulation of cars, the road cutting the space from east to west has been sunk and is crossed by three foot-bridges.

The shape of the peninsula, upon which already stand the main university buildings, has been recognized and emphasized. The central buildings group round the west and north escarpment of the peninsula. Enclosed within are gardens and groves of trees. The isthmus of land to the north carries the men's halls to the perimeter of the site. The



G. EDUCATIONAL BUILDINGS

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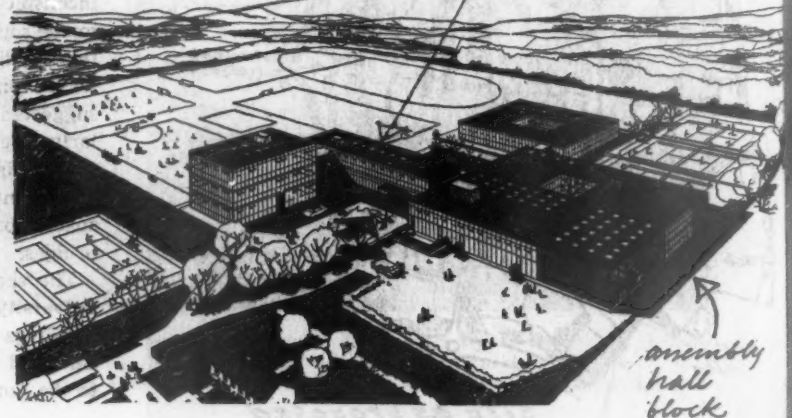


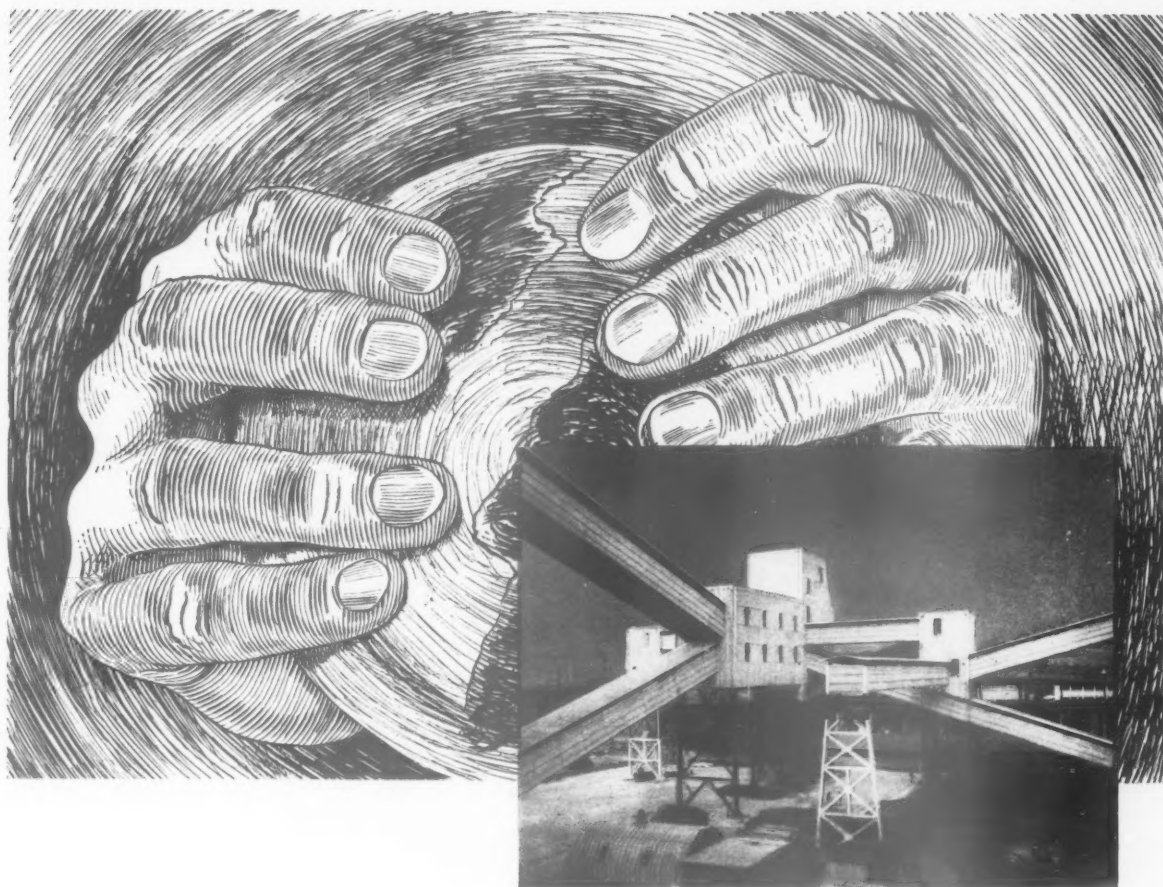
science departments, whose future size is unpredictable, lie on the level land east of the hill. The existing Trent Building by virtue of its size, position and historic character, has been adapted as a central teaching library of one million volumes, the character of the great hall and the existing library being retained. The domestic identity of the Vice-Chancellor's residence, and of the Faculty Club, has continued to be recognized and retained, in order to emphasize the human scale in a group of buildings that is essentially monumental. The administration building is placed for ease of access from all parts, and forms a single unit with adjoining buildings of the Humanities, grouped along a sequence of garden courts. Here also are the Institute of Education and the Department of Education. The gardens are closed on the north by buildings of general use, and by the copper-domed assembly hall. West of the Humanities buildings the ground falls, and extensions are woven round the existing house, once the home of Lord Trent. The men's halls are grouped round the perimeter east of the Wollaton Park entrance; the women's halls are along the west boundary. It is proposed that the public buildings east of the lake be incorporated in the university precinct and redesigned as a sports centre. It has not been considered desirable or possible to include an arboretum within the existing site. The general over-all landscape character is that of an English park, and there is insufficient space available for a special reserve for specimen trees. Nevertheless, there is scope for special trees interspersed throughout the site, especially in the centre gardens, as an enrichment to the botanical and faculty gardens. No medical school has been shown on the plans. This would require from forty to seventy acres of land and would occupy the north-west corner in place of two residential colleges. In view of the construction of the new bridge across the Trent, the north-east corner of the site has been allocated to an hotel. Above it would be residential flats for married research students or staff.

GRAMMAR SCHOOL: BEIGHTON, DERBYSHIRE

Architects' Co-Partnership

The Birley School is a three-form entry secondary grammar school for boys and girls, with halls designed for use by outside organizations. The site is open and exposed to the prevailing winds and falls steeply from west to east. There is a fine view southwards across the slope and eastwards from the upper part of the site over the top of a housing estate. There are three new schools immediately adjacent to the north boundary of the adjoining site and this school has been placed so that the four schools will to some extent form a 'campus'. Blocks of buildings have been kept simple in form, with no changes of roof level within each block. Changes of floor level have been arranged by using the fall on the site. The entrance, administration, library, and sixth-form accommodation is in one two-storey block which links





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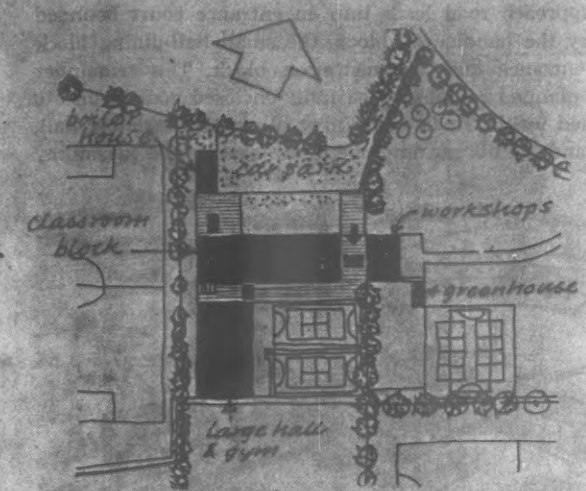
LINOLEUM



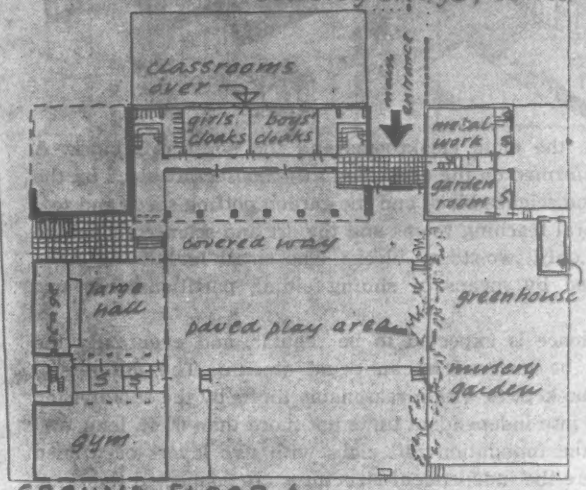
"THELMA" stands for The Linoleum Manufacturers' Association, 127 Victoria Street, London, S.W.1.

For further information write to the Association or to any of the following members:—

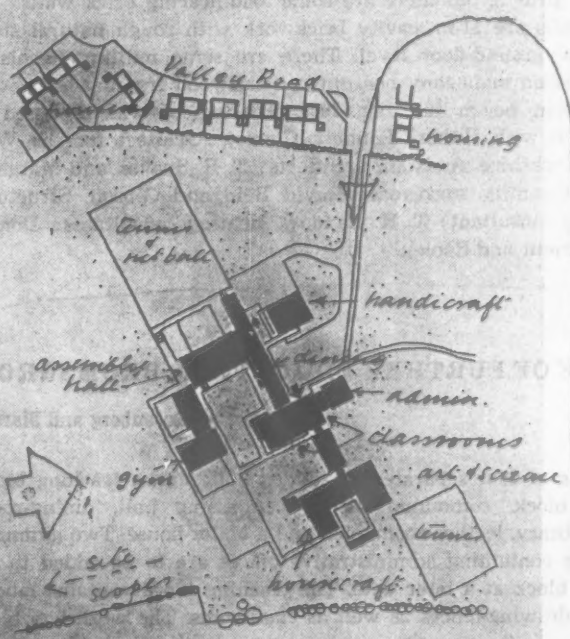
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SITE PLAN Secondary School: Sowerby Bridge, Yorks



GROUND FLOOR



at ground- and first-floor level with the ground and first floors of the three-storey block containing the bulk of the formal teaching, together with some practical rooms on its ground floor. The assembly-hall block, which also contains the gymnasium, changing-rooms, kitchen, wood and metalwork rooms, and some formal teaching rooms, is linked to the mezzanine level of the administration block. The science block is planned round a courtyard, used for biology, and is linked to the assembly-hall block. The small hall is designed to contain a fully-equipped stage, has a stepped floor, and will be used as an intimate theatre. Its back wall is formed of a sliding folding partition opening on to the platform of the large hall to allow for larger audiences on certain occasions. The library is planned as a double-height room with views down into it from the upper level.

The building has a light steel frame planned on a 3 ft. 4 in. module, with precast concrete slab floor and roof units. Internal partitions are of preformed gypsum plaster honeycombed panels. External cladding is glass curtain walling with some panels of brickwork. Opening windows are mostly top-hung hoppers.

Building will start in March. The school has been designed in collaboration with F. Hamer Crossley, Derbyshire County Architect.

SECONDARY SCHOOL: SOWERBY BRIDGE, YORKS

James Cubitt and Partners

A four-form entry mixed secondary school for 600 pupils. Sowerby Bridge is near Halifax. The site is steeply sloping and is subdivided by dry stone walls with trees planted alongside them. The plan has been determined by the desire to take full advantage of the views to the south across a valley as well as to make economical use of the



contours. The main teaching areas occupy four floors, with specialist classrooms on the north side and general classrooms on the south.

The gymnasium and workshop blocks are constructed with reinforced concrete frames. The main classroom block has a steel frame rising from reinforced concrete columns at ground level and pre-stressed concrete floors.

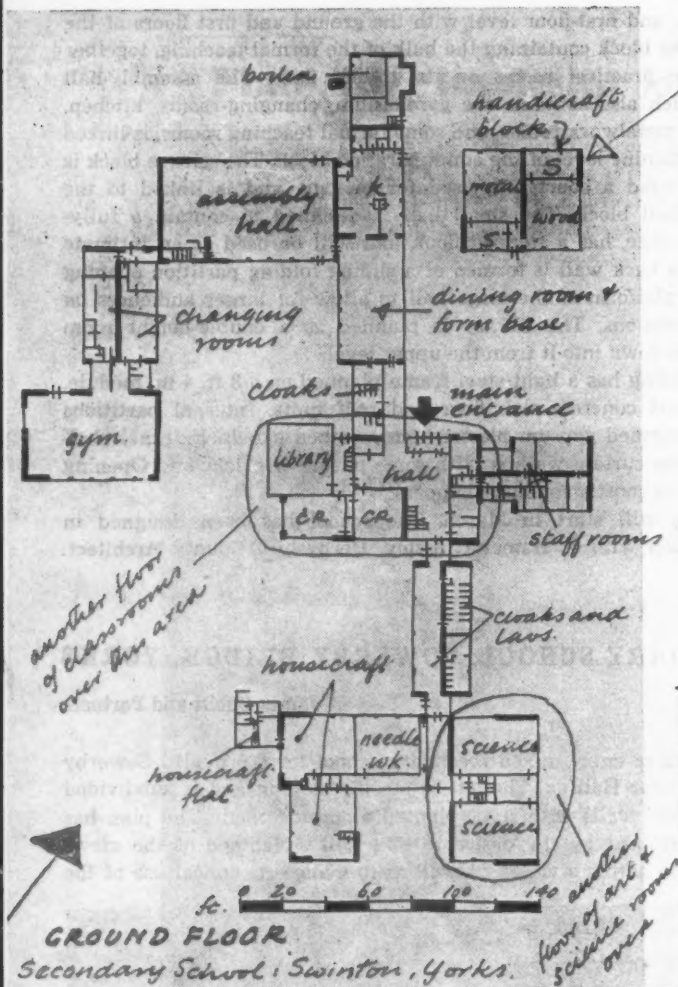
Work is due to start in March. It has been designed in collaboration with Hubert Bennett, county architect of the West Riding of Yorkshire.

SECONDARY SCHOOL: SWINTON, YORKS

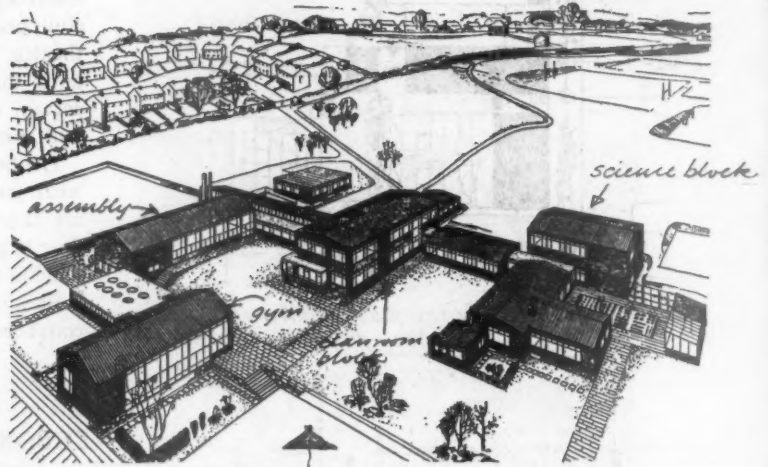
Robert H. Matthew

A three-form entry secondary modern school for 500 boys and girls. The site slopes from north to south. A housing scheme bounds the west side, and playing fields are to be laid out to the south and north. Unworked coal seams lie at various depths below the site. The plan was determined chiefly by three factors: the limited access—the approach is through the housing scheme, but this is conveniently near the flattest part of the site—the likelihood of future mining subsidence, which required relatively small units in light construction and precluded two-storey planning apart from two small areas, and

6. EDUCATIONAL BUILDINGS



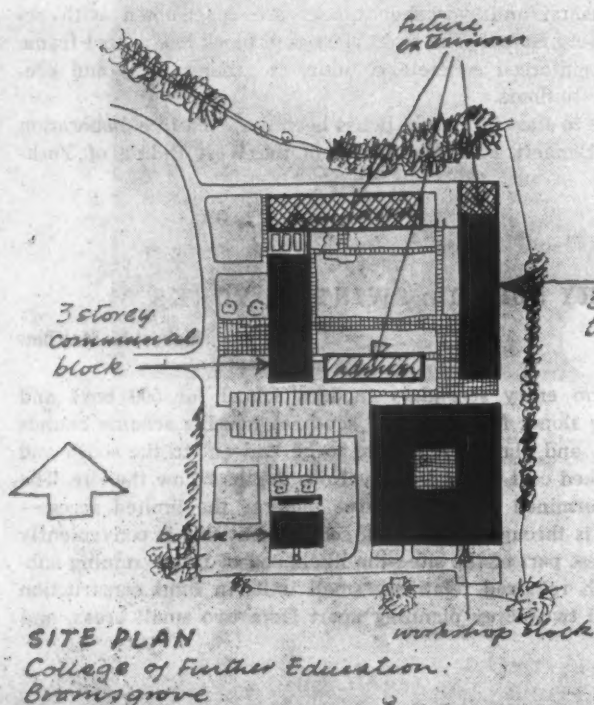
a rather bleak outlook, which made an 'inward-looking' school desirable. The approach road leads into an entrance court bounded on three sides by the handicrafts block, the small hall-dining block and the main entrance and administration block. The remainder of the school is planned round two partially-enclosed courts—one to the west contained by the small hall-dining block, the assembly hall, the gymnasium and the library, and one to the east by the two-storey



classroom block, the main cloakrooms and the housecraft block. A smaller court is formed on the east side of the housecraft block by the two-storey art and science block and the garden potting sheds and tool stores. The general teaching rooms and the art and science rooms are grouped in the only two-storey blocks. The small hall-dining room can be converted by means of sliding-folding partitions into two teaching rooms.

Mining subsidence is expected to be regular, and eventually the whole site will be lowered by an equal amount. The differential settlement will be kept to within reasonable limits by the sub-division of the buildings into independent units not more than 60 ft. long, and by reinforcing the foundation raft slabs with two layers of welded steel mesh. Where the independent structures are connected there are 6-in. gaps between the rafts and 9-in. movement joints in the walls and roofs, these being bridged with pliable aluminium strips. The foundations are reinforced concrete rafts bedded on sand. The structural frame is mainly of rolled steel sections with roofs of trusses and lattice girders, but there are some load-bearing brick walls. The external walls are 11-in. cavity brickwork with rough natural stone walls below ground-floor level. There are some infilling panels of vertical African mahogany boarding on softwood framing.

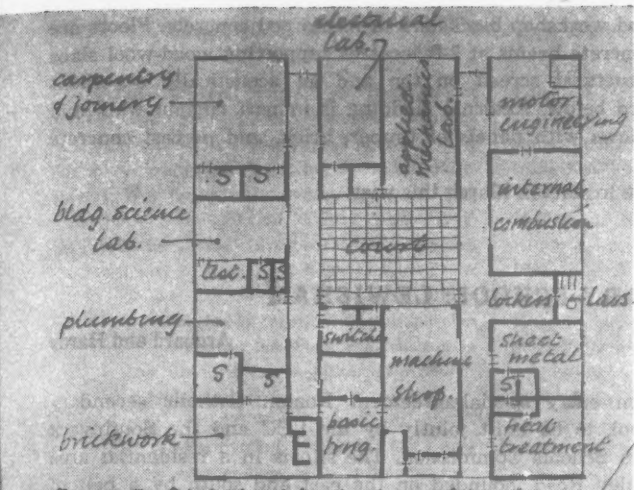
Construction began in May, 1955. The school was designed in collaboration with Hubert Bennett, County Architect for the West Riding of Yorkshire. Assistant architects: T. R. Spaven and Margaret M. Little. Quantity surveyors: David Reid and Gibson. Structural engineering consultant: T. H. Haddow. Heating consultants: Donald Smith, Seymour and Rooley.



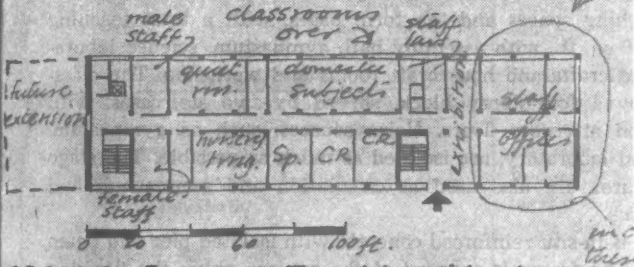
COLLEGE OF FURTHER EDUCATION: BROMSGROVE

Yorke, Rosenberg and Mardall

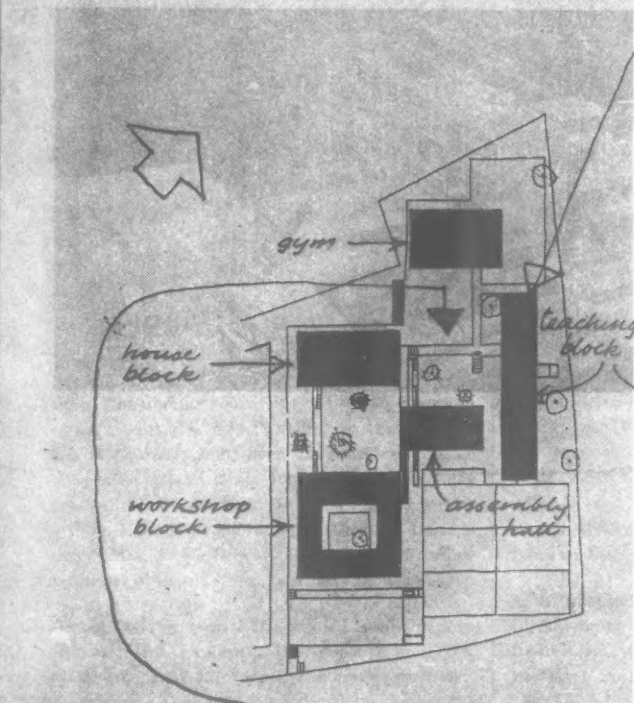
Consisting of four separate but related buildings, a teaching block, workshop block, communal block (comprising hall, dining-room, kitchens, library, lecture-room, etc.) and a boiler-house. Two gymnasias and a wing containing administrative offices are to be added to the communal block at a later date. The teaching block contains laboratories and drawing-offices as well as classrooms. The workshop block



FLOOR PLAN - Workshop block



GROUND FLOOR - Teaching block
College of Further Education: Bromsgrove



SITE PLAN Comprehensive School: Dulwich

accommodates the engineering and building departments. The two-storey boiler-house serves both the college and a nearby high school.

The teaching block is constructed with precast reinforced concrete columns with double external walls consisting of $4\frac{1}{2}$ -in. brickwork and an inner skin of concrete blocks. Windows are timber vertical sliding sashes. The workshop block has a steel frame, with boxed columns formed of two welded channels, and a roof of lattice trusses with metal roof-decking. All steelwork is exposed and treated with a zinc spray process and painted. External walls are 11-in. cavity brickwork; and internal walls 9 in. brick. Most of the services are in the ceilings. Lighting is through metal louvres beneath the trusses, with roof-lights and fluorescent lights above. The communal block has an in-situ reinforced concrete frame, with steelwork (similar to that in the workshop block) for the section containing the main hall.

Work on the first stage is expected to begin in April this year.

COMPREHENSIVE SCHOOL: DULWICH

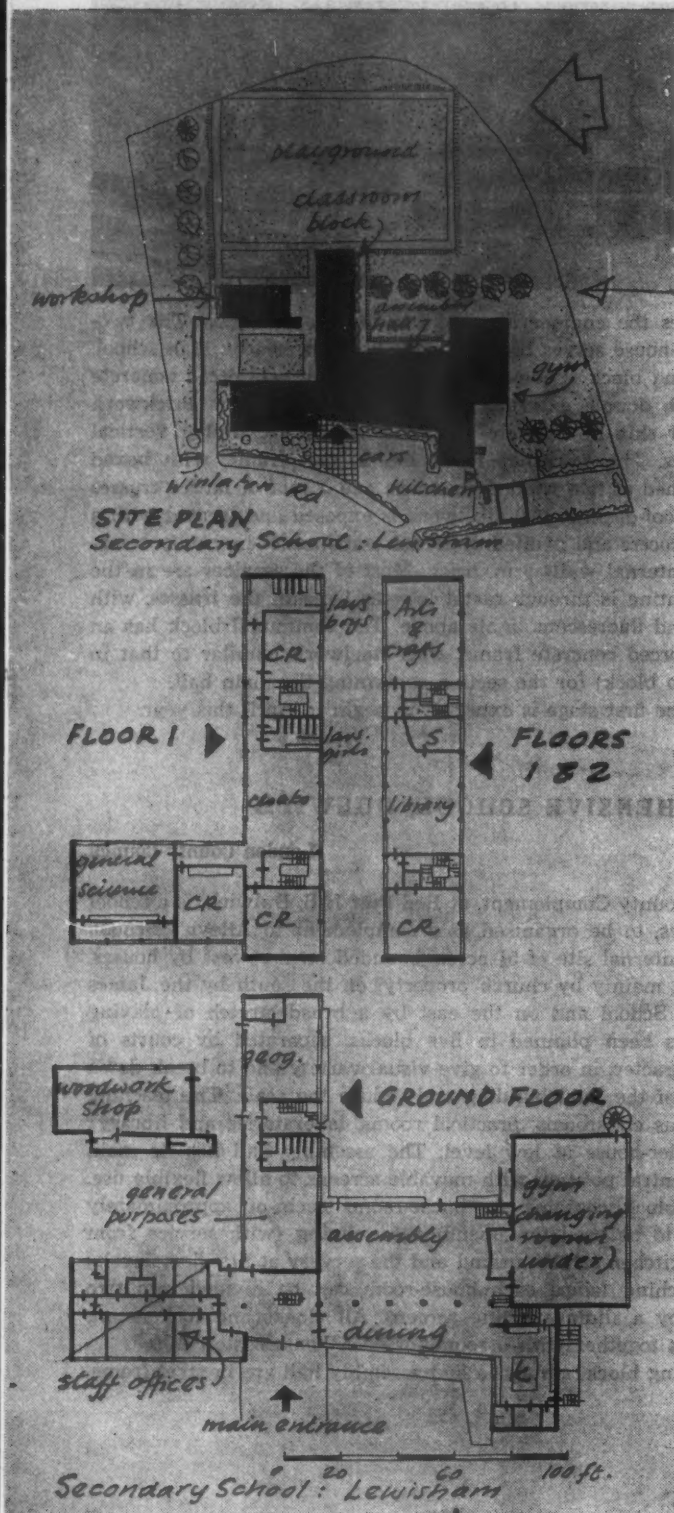
London County Council

Alleyn's County Complement, at Red Post Hill, Dulwich, is a school for 1,470 boys, to be organised as a complement to Alleyn's School. It is on an internal site of $5\frac{1}{2}$ acres, bounded on the west by houses, on the north mainly by church property, on the south by the James Allen Girls' School and on the east by a broad stretch of playing fields. It has been planned in five blocks, separated by courts of differing character, in order to give visual variety and to break down the volume of the total building and reduce the scale. The teaching block contains classrooms, practical rooms, laboratories and library; also the boiler-house at low level. The assembly hall has its main stage in a central position with movable screens to allow flexible use. The house block contains six house-rooms each of approximately 1,000 sq. ft. to be used for assembly, for dining (with service from the central kitchen on the ground and the servery at first-floor levels) and for teaching (since each house-room can be divided into two classrooms by a sliding/folding screen). All cloaks and lockers are in this block together with a room for each housemaster.

The teaching block, gymnasium and assembly hall are in steel frame.



6. EDUCATIONAL BUILDINGS



The house and workshop blocks are in reinforced concrete. Floors are of precast concrete beams at 2-ft. centres supporting wood-wool slabs and 2-in. structural screed on top and an acoustically absorbent building-board below. External cladding is in part curtain wall, and in part windows with panels of timber, brick, and precast concrete slabs.

Work is due to start in March this year.

SECONDARY SCHOOL: LEWISHAM

Archard and Hardy

A two-form entry special-agreement Roman Catholic secondary modern school, to be built jointly by the LCC and the Southwark R.C. Diocesan Schools Commission. The site is in a residential area off the Bromley Road, bounded on the east and south by a belt of trees forming part of Woodland Walk, Downham. The plan provides thirteen teaching spaces and ten form bases, with a total teaching area of 14,500 sq. ft., with assembly hall, gymnasium, science laboratory, arts and crafts and housecraft rooms and workshop. The classrooms occupy a four-storey block, served by two staircases, with circulation on alternate floors. Noise sources, such as gymnasium, workshop and laboratory, are isolated as much as possible. The stage and dining area are also used as circulation and gymnasium and dressing rooms.

The frame is in-situ reinforced concrete with isolated pier and beam foundations. The frame is exposed at the returns only; the flanking walls are in glass curtain walling, but the floors are carried through and exposed on the face. Columns are placed behind the curtain walling. Solid end panels are in facing bricks with an inner leaf of breeze concrete. Where exposed externally the frame is faced with white artificial stone. Facings are heather-coloured sand-lime bricks. Solid panels to windows are in green-faced asbestos cement panels. The chimney flue is free-standing and consists of egg-shaped concrete sewer-pipe used as permanent shuttering. Heating is by forced draught convactor cabinets, from an oil-fired boiler system.

Work is expected to begin early this year. Chief assistant architect: C. A. B. Gowers.



SOME BIOGRAPHICAL NOTES on the architects represented in this issue

A. Hodson Archard: trained at the Bartlett School; began practice, 1930 (churches, schools, housing, etc.); war service, Royal Engineers; after the war, became lecturer at Northern Polytechnic, London; resumed private practice, 1946; partnership with Ronald Hardy since 1949.

Ronald Hardy: trained Liverpool under Reilly and Budden (B.Arch. with First Class honours); war service, Royal Engineers in Far East, India, Burma and Hongkong; mentioned in despatches for work on American Air Field construction in Assam; MBE for work in rehabilitation in Hongkong after Japanese occupation.

Architects' Co-Partnership: formed 1939, consisting of eleven members all of whom trained together at AA school; re-formed immediately after war by eight of the original group, seven of whom make up present firm: Kenneth Capon, 39; Peter Cocke, 37; Michael Cooke-Yarborough, 39; Anthony Cox, 39; Michael Grice, 37; Leo de Syllas, 37; Michael Powers, 39. Designed Brynmawr rubber factory; several private houses; parts of 1951 South Bank exhibition; primary schools for Coventry and Herts; secondary schools for Derbyshire, Yorks and Herts.

Eric Bedford: chief architect, Ministry of Works since 1951; Grissell Gold Medallist, 1934; appointed CVO 1953 for work on official Coronation decoration and Westminster Abbey annexe; member of RIBA Council.

Ronald Bradbury: born 1908; trained Manchester and Columbia University, New York; Athens Bursar, 1939; Lecturer, Durham University School of Architecture and private practice in North-East until war. Director of Housing, Glasgow, 1945-48; City Architect and Director of Housing, Liverpool, since 1948; member, RIBA Council.

Sir John Burnet, Tait and Partners. Gordon Tait, now senior partner, is son of the late T. S. Tait. Other partners are T. Kennedy Axten, E. A. Blade and C. Spencer Willmott. The firm has designed factories, hospitals, office buildings, shops and stores, etc.; also the Station Gate of the 1951 South Bank exhibition (and converted it afterwards into the present British European Airways terminus).

Bertram Carter: born 1896; trained Royal College of Art and as pupil of Lutyens; works include hospitals, factories, shops, flats, etc.; hon. treasurer of MARS Group since 1944.

Peter Chamberlin: born 1919; trained Kingston School of Art. **Geoffrey Powell:** born 1920; trained AA. **Christopher Bon:** born 1921; trained Zurich and Milan. Partnership, formed 1952, has built London Shoe Co. shop in New Bond Street; Golden Lane housing scheme, City of London (see 1954 and this Preview issues); schools; warehouse at Witham, Essex (see next month's AR).

Harold Conolly: born 1901; trained Leeds; deputy city architect, Bradford, 1937-39; city architect, Bradford, 1939-42; deputy county architect,

Essex, 1942-45; county architect, Essex, since 1945.

James Cubitt: born 1914 in Melbourne, Australia; trained AA; war service in Royal Engineers in West Africa, India and Burma; studio instructor, 1946-48, at Kingston School of Art; since 1949, senior partner, James Cubitt & Partners; since 1951, senior partner, James Cubitt, Scott & Partners, Gold Coast. **Stefan Buzas:** born 1915 in Hungary; trained Vienna, Polytechnic and AA School; instructor, 1944-49, Kingston School of Art; became partner in James Cubitt & Partners, 1949. **Fello Atkinson:** born 1919; Sir Walter Lawrence Scholarship to AA School, 1936; completed training at AA and School of Planning after serving in Royal Navy from 1940-46; worked on East Kilbride New Town, 1947-48; taught at AA School, 1948-54; Fulbright exchange lecturer at Harvard University, 1950-51.

Frankland Dark: born 1903; trained RA School; associated with F. Q. Farmer since 1931 (partnership since 1934; Farmer retired 1952). The firm has built power stations, industrial buildings, factories, schools, houses and showrooms, including a quantity of work in Kuwait and elsewhere in the Middle East.

Enrico De Pierro and Henry Elder: partnership established 1952 to carry out design for technical college at Poole, Dorset, after competition had been won by De Pierro in 1951; general practice with special interest in schools and theatres; both partners also teach. De Pierro was trained at McGill and Michigan Universities; Elder at Manchester University.

Louis de Soissons: born Montreal, Canada, 1890. Articled to J. H. Eastwood; trained RA Schools and École des Beaux Arts, Paris; Tite prizeman, 1912; Henry Jarvis student, 1913; architect for Italy, Imperial War Graves Commission; member, Royal Fine Art Commission since 1949; architect-planner, Welwyn Garden City; architect of George VI memorial. Partners: Peacock, Hodges and Robertson; works include industrial and social service buildings, shops, theatres, housing, war memorials, etc.

John Murray Easton: born 1889; trained Scotland and London; Godwin bursar 1927; president AA, 1939-40; member of RIBA Council since 1951; Royal Gold Medallist, 1955. **Sir Howard Robertson:** born 1888; trained AA, London University and Paris; principal of AA throughout 1920's; Royal Gold Medallist, 1949; past president RIBA; member Royal Fine Art Commission. Partnership established 1919 (at first with late Stanley Hall), has built Royal Horticultural Society Hall, Gt. Ormond Street Children's hospital, Government exhibition pavilions, Hatfield Technical College, etc.; also interiors of liners; architects of new Shell office building, South Bank, and of Bank of England printing works, Debden, Essex.

A. G. Sheppard Fidler: born 1909; city architect, Birmingham; trained Liverpool (under Professor Reilly) and at the School of Civic Design under Professor Abercrombie; Victory Scholar, 1933;

Rome Scholar, 1933; formerly chief architect, Barclays Bank; chief architect, Crawley new town, 1947-52; member RIBA Council since 1953.

Frederick Gibberd: born 1908; studied Birmingham; past Principal AA School; member RIBA Council since 1952 (vice-president, 1950-51); member, Royal Fine Art Commission; works include Pulman Court, Streatham, Hackney Housing, London Airport terminal buildings (see 1954 Preview issue and July and November, 1955, AR); marketplace at Lansbury neighbourhood, offices on Albert Embankment now under construction (see 1955 Preview issue), etc.; architect-planner of Harlow new town; author of *The Architecture of England and Town Design*.

Ernö Goldfinger: born 1902 in Budapest; trained Switzerland and France (Auguste Perret's atelier); came to England, 1934; has designed shops, houses (including row of three in Willow Road, Hampstead, one of which he occupies), schools, offices, etc.; author of *Penguins County of London Plan Explained* (with E. J. Carter), *British Furniture Today*; English correspondent for *L'Architecture d'Aujourd'hui*.

Frank Gollins: born 1910; trained Birmingham; in practice before the war with R. A. Smeeton. **James Melvin:** born 1912; trained AA; worked in Paris and Vienna and was in partnership with Lionel Smith. **Edmund Ward:** born 1912;



previously a partner with Sir John Brown & Partners. Present firm formed after the war; built own offices, Manchester Square; Sheffield technical college now under construction (see 1954 Preview issue); schools in Glamorgan, etc.

W. Stanley Hattrell: took over father's practice in Coventry in 1925. **Duncan Kay:** articled to a Birmingham firm, and part-time student at Birmingham School; worked in London with Brian Poulter before joining W. S. Hattrell in 1935, becoming a partner in 1937. **Norman R. Branson:** articled to a Birmingham firm; became partner in present firm in 1948; specializes in stage design and sculpture and was chiefly responsible for design of theatre illustrated in this issue. **Savile Greenwood:** trained Liverpool; joined W. S. Hattrell, 1946; partner since 1948.

Leonard C. Howitt: city architect, Manchester, since 1945; trained Liverpool; managing assistant

to Herbert J. Rowse, Liverpool, until 1934; chief architectural assistant to Lancelot H. Keay, Liverpool Director of Housing, 1934-37; deputy city architect, Manchester, 1937; president, City and Borough Architects' Society; president, Manchester Society of Architects; member, RIBA Council since 1947 and chairman of Salaried and Official Architects' Committee.

Geoffrey Jellicoe: born 1900; trained AA; in partnership with J. C. Shepherd until 1930, engaged on gardens and domestic work; afterwards in independent practice; work included Calverton Colliery buildings, in collaboration with Miners' Welfare Commission; Principal, AA School, 1939-41; consultant, Ministry of Works, 1942; work includes landscape and town plans for Wolverton (Bucks), Guildford and Wellington (Shropshire); appointed designer for new town of Hemel Hempstead, 1947; consulting architect to Government of Northern Rhodesia, 1947 (and designed Lusaka hotel there); past-president, International Federation of Landscape Architects.

W. A. Ledgard: joined the firm of Kitson, Parish, Ledgard and Pyman in 1908 as articled pupil (the two principals were then Sydney Kitson, considered to be the father of the firm, who died just before the war, and James Parish, who joined in 1902, became a partner in 1914 and died in 1933). After war service, W. A. Ledgard became a partner; is a General Commissioner of Inland Revenue. **Noel Pyman:** joined office, 1922; became a partner, 1929; in sole charge during the last war, at the same time serving with the Royal Observer Corps. **William Henry King:** trained Leeds; joined the office in 1928; partner, 1936; specializes in hospital design; during the war was with the Ministry of Aircraft Production. **Norman H. Fowler:** joined the office in 1927; partner, 1936;



war service with Royal Artillery, returning to architecture in 1946 since when he has worked on a number of schools, a power station and buildings for War Department; acts as external examiner to Leeds School of Architecture.

R. A. H. Livett: went to Leeds in 1934 as housing director in charge of all work—including housing management for newly formed housing committee; appointed city architect when separate architect's department was formed in 1945; Sussex man—served in Royal Sussex Regiment in 1914-18 war, then went to AA, under Robert Atkinson; on qualifying, worked under Paul Waterhouse until his death, then for short period with Michael Waterhouse; has been chief assistant architect at



Nottingham and deputy housing director at Manchester; responsible, among other work at Leeds, for Quarry Hill flats.

Eric Lyons: born 1912; articled to London architect; supplemented this by training at Regent Street Polytechnic; worked in various London offices, including that of Gropius and Fry; set up in partnership with Geoffrey Townsend in 1938,



which was abandoned in 1939 and resumed after the war; partnership dissolved, 1954.

Frederick MacManus: born Dublin, where his interest in architecture was kindled by Vincent Kelly; trained Dublin School of Art, later at the AA; has worked with Beckett and Harrington, Dublin; Clough Williams-Ellis and W. L. Stoddard and Associates, New York; during war years worked at MOW as secretary of 'Inter-Departmental Committee on Building Materials Standardization' and technical officer to 'Standards Committee'; later as advisory architect to EJMA on standardization of joinery; afterwards joined in partnership with Edward Armstrong, who



has since retired; principal work, housing in Battersea, Kensington, Chelsea (Cremorne Estate), etc. Photograph shows Armstrong, left, and MacManus, right.

J. L. Martin: born 1908; architect, London County Council; trained Manchester (Soane medallist, 1930); head of Hull School, 1934-39; deputy architect, LMS railway, 1939-48; deputy architect, LCC, 1948 (chiefly responsible for Royal Festival Hall); member RIBA Council since 1953; author (with wife Sadie Speight), *The Flat Book*, 1937. Appointed 1955 first Professor of Architecture at Cambridge University, which post he takes up in October 1956.

E. D. Jefferiss Mathews: born 1907; trained as a surveyor; subsequently took outside RIBA final and joined family firm of architects established by great-grandfather in 1830's; war service with Royal Engineers, ending as Assistant Director of Works, Persia and Iraq; present practice (with two partners, Oswald D. Pearce and A. G. Nisbet) specializes in hospital and industrial work; vice-president RIBA since 1953; chairman ARCUK, 1951-53.

Robert H. Matthew: born 1906; trained Edinburgh; Pugin Student, 1929; Soane medallist, 1932; Arthur Cates prizeman, 1932; Bossom Gold Medallist, 1936; member RIBA Council since 1950; architect and town-planning officer, LCC, 1946-52; previously chief architect and planning officer to Department of Health for Scotland; now Professor of Architecture, Edinburgh University; recent work includes Turnhouse Airport, Edinburgh (see 1955 Preview issue); appointed architect for New Zealand House, to be constructed on Carlton Hotel (Haymarket) site, London.

Elie Mayorcas: born 1908, London, of Spanish extraction; trained AA (Distinction in Thesis); Henry Florence Student and RIBA Silver Medallist, 1932; worked with Verner O. Rees, Joseph Emberton and late Robert Atkinson; war service with Royal Engineers (escaped from Singapore after its fall); engaged principally on schools and industrial welfare projects.

Edward D. Mills: born 1915; studied architecture at Regent Street Polytechnic School of Archi-



ture; private practice since 1937; author of *The Modern Factory*, *The New Architecture in Great Britain*, and a book not yet published on modern church architecture; member of RIBA Council; member of RIBA Science Committee and Prizes and Studentships Committee; zone architect Festival of Britain 1951 South Bank

[continued on page 76]

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exhibition; awarded RIBA Alfred Bossom Research Fellowship, 1953; principal works include factories, churches (Preview, 1955), schools, flats, office buildings, etc.

Richard Sheppard: born 1911; trained AA; partnership includes his wife (formerly Jean Shufflebotham) and Geoffrey Robson; work includes schools in Herts, Essex, Worcs., etc., hostel at Wye College, Kent, shipping offices at Newcastle, housing at Harlow, etc.; member, RIBA Council; author of *Prefabrication* (1946), *Building for the People* (1948).

Basil Spence: born 1907; trained London (pupil of Lutyens) and Edinburgh; Arthur Cates prizeman, 1931; Pugin student, 1933; recent work includes schools, housing, many exhibitions (e.g., Sea and Ships building, South Bank, 1951); winner of Coventry Cathedral competition, 1951 (see 1954 Preview issue); planning consultant to Edinburgh University; member, RIBA Council since 1952.

C. G. Stillman: born 1894; 32 years' service in local government; one of the first to experiment with prefabricated schools when county architect of West Sussex; county architect of Middlesex since 1945; past vice-president RIBA.

Alfred F. A. Trehearne: founded the firm on 1st January, 1900; in 1906 took into partnership C. S. Norman, who died in 1925; sole partner until 1930 when joined by E. W. Preston and F. R. Jelley; the latter left in 1945; A. E. Lees joined in 1931 and died in 1955; F. P. C. Trehearne and

W. R. Preston joined in 1941; H. Mortimer joined in 1951; T. R. Preston and G. Gneditch in 1955; all worked for the firm before becoming partners; pre-war work comprised offices, flats, banks, etc., including buildings in Kingsway; first new post-war building was St. Bridget's House in the City; most recent to commence is new headquarters for UK Atomic Energy Authority (in conjunction with Leslie C. Norton and Partners) in Lower Regent Street.

Noel Tweddell: trained Durham University and London; started private practice in 1936; after war service in the army joined the Housing Development Group of the Ministry of Works and was Assistant Director of Works for two years, working on prefabrication techniques, until he was appointed as the first chief architect of Harlow new town, under architect-planner Frederick Gibberd; since 1949 has been chief architect and planner of Basildon new town.

Basil Ward: New Zealander, born 1902; trained under J. A. Louis Hay; Henry Jarvis student, 1926; a founder member of the MARS Group; in partnership, 1929-39, with Connell and Lucas (modern houses); now with Ramsay, Murray & White; recent building is MRC Laboratory at Hammersmith; Professor of Architecture, Royal College of Art, 1946-53, then appointed first Lethaby Professor, RCA.

Douglas Wood: senior partner in the firm of Douglas and J. D. Wood; trained by the York Diocesan Surveyor; qualified in 1902; private

practice, 1907-14, at New Malden; 1914-18 war service on Haig's staff; Housing Commissioner for Midlands, 1919-22; Mayor of Westminster, 1944-45.

J. D. Wood: eldest son of above; articled to C. H. James, studied at Northern Polytechnic; war service as RAF pilot, 1939-46. **Michael Wood:** prisoner of war, 1941-45 (RAF Bomber Command); began studying architecture in Stalag Luft 3 (Wooden Horse); escaped three times for which he was awarded MBE in 1945; trained afterwards at Bartlett School; qualified, 1951, when he became partner in firm.

Kenneth Wood: born 1921; qualified in engineering before training at Regent Street Polytechnic; worked with Farmer and Dark and other well-known architects; now in private practice.

F. R. S. Yorke: born 1906; studied in Birmingham; author of *The Modern House*, *The Modern House in England* and (with Penelope Whiting) *The New Small House*, and editor of *Specification*; a founder member of the MARS Group; member of RIBA Council since 1951; in partnership with Mariel Breuer, 1936-38; one of the architects participating in the international housing exhibition, Berlin, 1957; appointed, 1955, architect to Gatwick airport; **Eugene Rosenberg:** born 1907; studied Prague and Paris. **C. S. Mardall:** born 1909; studied Northern Polytechnic and the AA. The three have been in partnership since 1946 and among their principal buildings are: schools at Stevenage, Lansbury, Ruislip and many other places, flats, industrial buildings, hospitals, housing in Harlow new town, etc.

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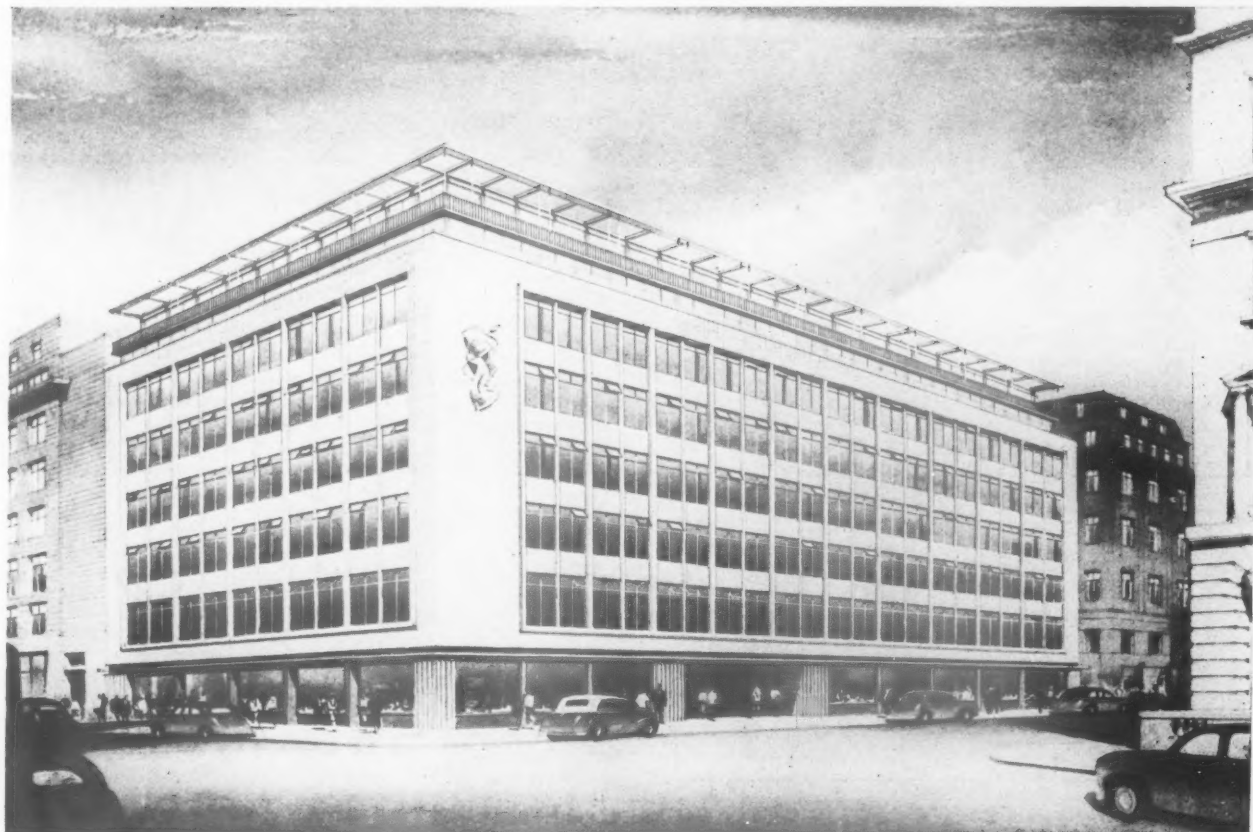
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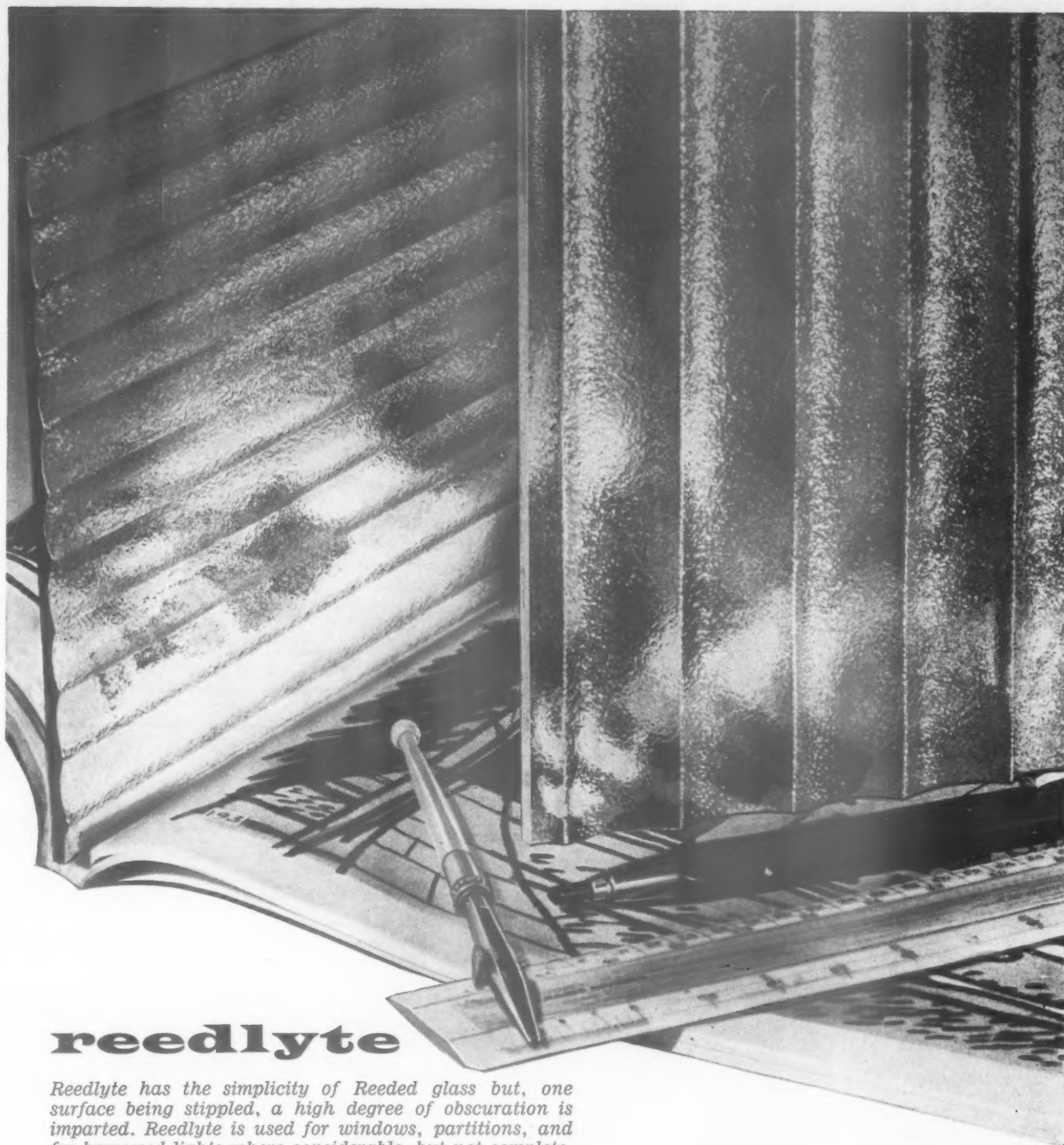


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Corrections

We regret that on page 350, AR, November, 1955, Messrs. J. & B. Abbott (Contractors) Ltd. were credited with responsibility for plastering on the S.E. Passenger Handling Building, London Airport. They were in fact the painting contractors for this building.

In the description of the Laboratories at Rangoon, AR, November, 1955, page 313, the consultants for the space deck unit system were omitted. They were Bolton, Hennessey & Partners.

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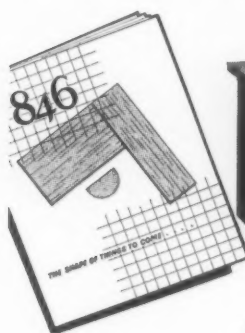
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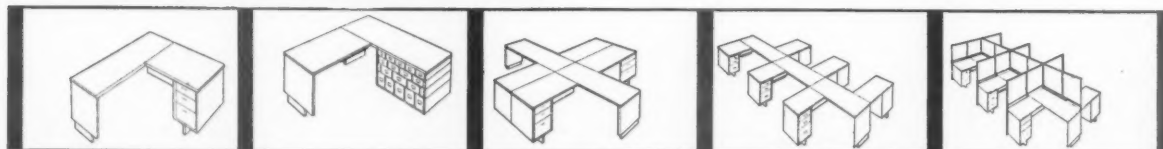
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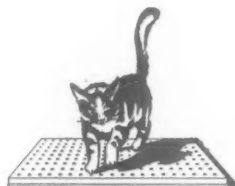
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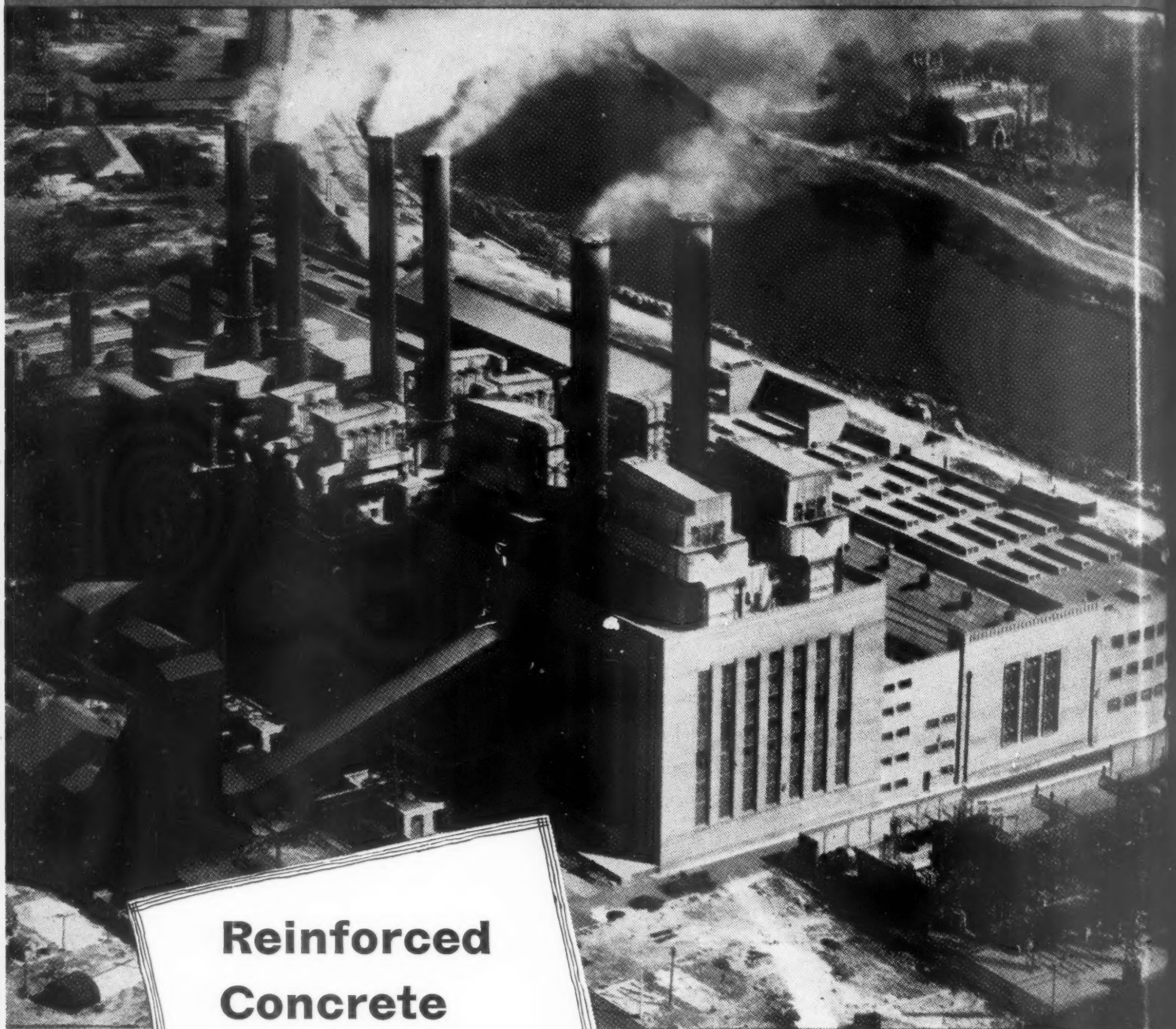
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